NOTE

This Microfiche meets the quality requirements of the American National Standard for Microfiche of Documents (ANSI PH5.9-1975). However, because of imperfections in the document from which it was made, it contains images that are illegible or difficult to read. The source document for this microfiche is the best copy that could be obtained prior to filming.

Congressional Information Service, Inc
Washington, D.C.

CIS

MONETARISM IN THE UNITED STATES AND THE UNITED KINGDOM

HEARING

BEFORE THE

JOINT ECONOMIC COMMITTEE
CONGRESS OF THE UNITED STATES

NINETY-SEVENTH CONGRESS

FIRST SESSION

OCTOBER 6, 1981

Printed for the use of the Joint Economic Committee

U.S. GOVERNMENT PRINTING OFFICE
89-772 O WASHINGTON: 1982

J84-15

JOINT ECONOMIC COMMITTEE

(Created pursuant to sec. 5(a) of Public Law 304, 79th Cong.)

HOUSE OF REPRESENTATIVES	SENATE
HENRY S. REUSS, Wisconsin, *Chairman*	ROGER W. JEPSEN, Iowa, *Vice Chairman*
RICHARD BOLLING, Missouri	WILLIAM V. ROTH, JR., Delaware
LEE H. HAMILTON, Indiana	JAMES ABDNOR, South Dakota
GILLIS W. LONG, Louisiana	STEVEN D. SYMMS, Idaho
PARREN J. MITCHELL, Maryland	PAULA HAWKINS, Florida
FREDERICK W. RICHMOND, New York	MACK MATTINGLY, Georgia
CLARENCE J. BROWN, Ohio	LLOYD BENTSEN, Texas
MARGARET M. HECKLER, Massachusetts	WILLIAM PROXMIRE, Wisconsin
JOHN H. ROUSSELOT, California	EDWARD M. KENNEDY, Massachusetts
CHALMERS P. WYLIE, Ohio	PAUL S. SARBANES, Maryland

JAMES K. GALBRAITH, *Executive Director*
BRUCE R. BARTLETT, *Deputy Director*

CONTENTS

WITNESSES AND STATEMENTS

TUESDAY, OCTOBER 6, 1981

	Page
Proxmire, Hon. William, member of the Joint Economic Committee: Opening statement	1
Meltzer, Allan H., professor, Graduate School of Industrial Administration, Carnegie-Mellon University, Pittsburgh, Pa	12
Laidler, David, professor of economics, University of Western Ontario, London, Ontario, Canada	24

SUBMISSIONS FOR THE RECORD

TUESDAY, OCTOBER 6, 1981

Laidler, David:	
Prepared statement	27
Paper entitled "On the Case for Gradualism"	35
Meltzer, Allan H.: Paper entitled "Tests of Inflation Theories From the British Laboratory"	17
National Retired Teachers Association and the American Association of Retired Persons: Statement of	120
Proxmire, Hon. William: Prepared statement of James Tobin, Sterling Professor of Economics, Yale University	4
Rousselot, Hon. John H.: Opening statement	3

MONETARISM IN THE UNITED STATES AND THE UNITED KINGDOM

TUESDAY, OCTOBER 6, 1981

CONGRESS OF THE UNITED STATES,
JOINT ECONOMIC COMMITTEE,
Washington, D.C.

The committee met, pursuant to notice, at 10 a.m., in room 2325, Rayburn House Office Building, Hon. Henry S. Reuss (chairman of the committee) presiding.

Present: Representatives Reuss and Richmond; and Senator Proxmire.

Also present: James K. Galbraith, executive director; and Paul B. Manchester and Robert E. Weintraub, professional staff members.

OPENING STATEMENT OF SENATOR PROXMIRE

Senator PROXMIRE [presiding]. The committee will come to order.

On October 6, 1979, Chairman Volcker announced what was regarded by many as a revolutionary change in operating procedures: Henceforward, the Federal Reserve would concentrate on meeting its annual targets for the growth rate of the money supply, and allow the Federal funds rate—previously the most important intermediate monetary policy target—to fluctuate without restraint.

Six months before that, the United Kingdom had embarked on an equally ambitious and revolutionary program. When Prime Minister Thatcher took office in May 1979, she announced that henceforward "overriding priority" would be given to the battle against inflation, and that control over the growth rate of the money supply would be the principal instrument in that battle.

Two years have now gone by—enough, I think most would agree, for a preliminary assessment of the experience with the new policies in the United States and the United Kingdom.

The key question in such an assessment is this: Has the use of these techniques enabled our Government and that of Britain to reduce inflation? And has this been done at a lower social cost than would otherwise have been the case?

There can be little doubt, it seems to me, that in the last 2 years a prolonged and determined tight money policy has, for the short to medium run, reduced inflation. In the United Kingdom, inflation shot up in consequence of measures taken at the beginning of Mrs. Thatcher's government, but it has gradually and arduously been brought back down to rates only slightly higher than 2 years ago. In the United States, inflation has come down—especially in the last

few months—partly as a result of good luck on food and energy, but partly also in response to a sustained policy of monetary restriction.

Whether such a policy can, by itself, establish conditions for stable prices over the long run—in a climate of restored economic growth—is another matter. What will happen when growth begins again? Will wages rise slowly—in an ideal world no faster than productivity growth—making nearly stable prices possible? Or will inflationary expectations reignite, setting off a new spiral and proving that all the suffering was for nought?

There is even more reason to doubt that this technique used by itself exclusively, to the exclusion of all other anti-inflation measures, will bring reduced inflation at the lowest possible social cost. Mrs. Thatcher and President Reagan have both rejected the use of incomes policy. Both the United States and the United Kingdom lack a strong antitrust and antimerger policy. And perhaps most important, both countries have so far failed in their efforts to produce a balanced budget. Thus monetary policy has truly borne the burden of fighting inflation alone.

What has been the result? In the United Kingdom today, there is more poverty, more unemployment, more social strife than at any time in the past 40 years. In the United States, high interest rates have wreaked untold damage on small business, housing, farmers, and productive capital investment. Surely if there is a way of reducing inflation without such side effects, we should take that way.

I believe that inflation can be reduced more rapidly and with less social suffering. We need an incomes policy. We need a strong antimerger and antitrust policy. And we need a balanced budget. A few days ago I took the floor of the Senate for 16 hours to argue against the extension of the debt ceiling above $1 trillion. I did so because I believe strongly that the time has come for the Federal Government to get out of the credit markets, at least to get out of an increasing share of the credit markets. If we need more spending cuts, let's have them—and make sure that in this next round of cuts the military budget comes in for its fair share. If we need new sources of tax revenue, then let's have that too, giving careful consideration to ideas for new progressive taxes which will restrain consumption and stimulate saving. And let's control the off-budget borrowing of the Federal Government as well. It's my understanding that last year, 1980, that of every $100 of new savings, funding the deficit took $17 and the off-budget borrowing took $17 for a fat one-third. In other words, if we had a balanced budget and had no net increase in off-budgeting borrowing, we would have had 50 percent more available than we had available in the private sector.

If we do these things, interest rates will come down. And lower interest rates, achieved without resort to expansionary monetary policy, would be the single best policy to promote more stable prices and fuller employment.

Today, two leading experts on monetary policy will discuss the effectiveness of and outlook for monetarism in the United States and the United Kingdom. We are honored to have the distinguished Prof. Allan Meltzer, Carnegie-Mellon University, who's testified before our Banking Committee and testified often in the past and is recognized

throughout our country as an expert. And I'm delighted to see Prof. David Laidler, University of Western Ontario, who's joining us today too. We looked forward to having Prof. James Tobin of Yale University present, but Professor Tobin's wife was taken ill and, unfortunately, he cannot be here, but we hope that we can have him appear in the future.

Before proceeding, and without objection, I will insert Representative Rousselot's opening statement, at his request, followed by Mr. Tobin's prepared statement in the hearing record.

[The opening statement of Representative Rousselot and the prepared statement of Mr. Tobin follow:]

OPENING STATEMENT OF REPRESENTATIVE ROUSSELOT

Today's hearing on "Monetarism in the U.S. and the U.K." is very timely. I commend the chairman for calling it and for the witnesses he has invited to testify. Professors Laidler, Meltzer and Tobin are well-known academics in monetary economics. Their views cover the spectrum from Keynesian to Monetarist. This promises to be an outstanding hearing, and I am sorry I will not be present.

Two years ago today, Federal Reserve Board Chairman Paul Volcker announced that henceforth the Fed would place more emphasis on controlling the monetary aggregates and less on controlling interest rates. However, in the event, at least until this spring, if the new policy was put into effect, it was implemented badly. The growth of the aggregates was both more erratic and, on average, faster than before October 1979. For example, the growth of M1B, which is the basic measure of the money supply, soared to 13.4 percent per year in the second half of 1980 and in the twelve months ending last April, it was 10.8 percent. You have to go back to World War II to find money growth that high for the basic exchange media money measure for periods that long.

In association with the speed-up of money growth, interest rates skyrocketed. For example, the 3-month Treasury bill rate soared to 15.7 percent in December 1980 and the prime rate to 21.5 percent. However, since April, the Fed has been doing what Chairman Volcker said it would do two Octobers ago. It is at last controlling money growth. Since April, M1B growth has been checked and closely controlled. In the latest 52-week period, it has grown only 5.2 percent. If the Federal Reserve continues on this course, we will, over a period of years, reap great dividends from this discipline. Inflation will be eliminated, interest rates will be purged of their inflation premiums and long-term economic stability will be promoted.

Already, we are beginning to receive some of these dividends. Short-term interest rates are lower now than last December and inflation is declining. But the path to a future without inflation, a future with reasonable interest rates, economic stability and full employment will not be easy or painless. We are going to take some bumps on the way. Nonetheless, although Congress can and I believe will further constrain government spending, and this will help the Federal Reserve to stay on its present course, I see no alternative, even if the deficit remains high, to the Fed's staying the new course of reducing money growth relentlessly to a rate commensurate with our economy's long-term potential to increase output, and keeping it there.

Prepared Statement of James Tobin, Sterling Professor of Economics, Yale University

In appraising monetarist policies in the United States and the United Kingdom, I would like to distinguish between small issues and big issues. The small issues concern which monetary aggregates are the targets of policy, what control instruments and techniques the central banks use, and how good their marksmanship is. The big issues concern policy goals and tradeoffs in terms of the economic outcomes that matter -- not monetary aggregates but inflation, unemployment, prosperity, and real economic growth.

The Bank of England and the British Treasury have, it happens, chosen a monetary aggregate -- sterling M-3 -- which lacks economic significance and is very difficult to control. Nevertheless, in a larger sense, the policies of H. M. government are thoroughly monetarist; the Thatcher experiment is as pure a test of a policy approach as history ever provides. In contrast, our Federal Reserve commands techniques that keep its chosen monetary aggregates pretty close to target. Yet the policies of our federal government are on the whole less decisively monetarist than those of Mrs. Thatcher.

The Mechanics of Monetarist Control

One of the most over-rated events of recent years was the change in operating techniques announced by the Federal Reserve two years ago, the substitution of bank reserves for the Federal Funds rate as the guide to day-to-day and week-to-week open market operations.

Under either technique, new or old, the guide is only an instrumental and temporary target, reconsidered and revised at every meeting of the Federal Open Market Committee or even between meetings. Adjustments in it can be made, and have been made, to try to keep the Fed's money stock targets on track. Those targets are various monetary aggregates, just as they were before October 6, 1979. Monetarist targets have dominated Fed policy-making since 1970, particularly since 1974 when the Congress began to require money stock targets.

Given the many slippages between actual Federal Reserve transactions and any monetary aggregate (especially seasonally adjusted), there is no control technique that can guarantee good marksmanship from week to week. Indeed there are no measurement techniques that can feed timely and accurate error information back to the controllers. Nevertheless over three or four quarters either technique can substantially achieve money stock target. If the Fed fails to meet a fourth quarter to fourth quarter target, it's most likely for deliberate reasons bad or good, not for lack of control. This was true before October 6, 1979, and it's true now. It is not surprising that the heralded revolution of October 1979 didn't accomplish any miracles of monetarist marksmanship. Nor is it a matter of great moment, except for those who stand to make profits by anticipating interest rates and seek clues in deviations from target which they expect the Fed to try to correct.

The folly of staking credibility on particular monetary aggregates has been dramatized by events in both the U. K. and the U. S. In recent years rapid innovations in transactions technology, financial institutions, and government regulations have radically altered demands for and supplies of various bank deposits and the degrees of substitutability among them and between them, the liabilities of nonbank intermediaries, and open market paper. The Federal Reserve tried to cope with these changes by redefining monetary aggregates, an exercise which clearly illustrated the conceptual confusions and statistical ambiguities inevitably involved in drawing a sharp line between things labelled "money" and other assets.

No sooner was the exercise completed than further innovations destroyed the contunuity of meaning of the new aggregates, notably the new favorite M1-B . Consequently the Fed now has to correct actual M1-B for the estimated impact of these changes -- specifically the extension of NOW accounts to the whole country -- in order to compare outcomes with targets.

M1-B targets for current and coming years implicitly envisage continuation or acceleration of upward trends in income-velocity whose erratic past is not understood and whose future is uncertain. In these circumstances, tying the future path of the economy to M1-B targets would be madness. This is one reason why the Fed also appears

to take M-2 targets seriously. One explanation for holding M1-B below the lower limit of the targeted bracket is that M-2 is at the top of its bracket.

One trouble with M-2 is that its growth rates reflect intermediation and disintermediation of trivial monetary or economic significance. Lender L can accommodate borrower B either directly, -- L buys B's commercial paper at 15% interest, -- or indirectly, -- L buys bank C's certificate of deposit at 14% and bank C lends to B. If the direct route is followed, the transaction affects no monetary aggregate. If the indirect route is followed, it raises M-2. In some circumstances, as this year, tight money is associated with a shift of lending and borrowing from long to short maturities. Since some short-maturity transactions will take place through banks and other intermediaries, M-2 is increased. But the increase is not the symptom of any economic development that requires further tightening of credit.

Similar ambiguities of meaning and difficulties of control vitiate the usefulness of the Bank of England's chosen target, sterling M-3. Once the Bank gave up the "corset," i.e., direct quantitative limits on intermediation, its control of M-3 was extremely loose and indirect. Lacking a system of effective cash reserve requirements like those in this country, the Bank of England tries to influence intermediation by operating in securities markets to affect the interest rate spreads between bank transactions and those in open markets.

Monetary Restriction, Credibility, and Disinflation

What really matters, however, is not precision in hitting particular monetary targets, but the overall thrust of policy quarters and years. Chairman Paul Volcker has tried to make that clear for the United States. Suppose the velocity of M1-B turns out to be higher and to rise faster than anyone now contemplates. Then the Fed's M1-B targets would support much more rapid growth of nominal GNP -- total dollar spending for goods and services -- than Volcker and his colleagues expected when they set the targets. Which would take precedence, the numerical M1-B targets or the economic scenario they were intended to bring about? Volcker left no doubt it would be the latter:

> Setting precise targets has inevitably involved us in consideration of the effects of technological and regulatory change on monetary measures. Those technical considerations should not obscure the basic thrust of our intentions -- that is, to lower progressively effective money and credit growth to amounts consistent with price stability. We believe that the targets for both 1981 and 1982 and our operations are fully consistent with that objective.
>
> I have often emphasized that money supply data -- like many other financial and economic data -- have some inherent instability in the short run. The trend over time is what counts, both as a measure of monetary policy and in terms of economic effect.

In both the U. S. and the U. K. the objective is to eliminate inflation by gradually but relentlessly reducing the growth of nominal

GNP. In the United States, for example, 10-12% growth of nominal GNP in the late 1970s would accommodate 2-3% normal real growth plus 7-10% inflation. If the Federal Reserve suceeds in a few years, as its Chairman promises, in limiting nominal GNP growth to 2-3% per year, then we will have normal output growth only if there is zero inflation, and we will have declining output if the inflation rate is above 3%. Chairman Volcker's true message is that the Fed will stick with its disinflationary policy no matter what. No matter how long it takes, how much unemployment it takes, how deep a recession it takes, the Fed will not rescue the economy until inflation has been expunged. This is also Mrs. Thatcher's policy, and so far the wreckage of the British economy has not lessened her resolve.

Candid advocates of this policy know that it entails a transition of several years and considerable real damage to the economy during the transition. They place great emphasis on the credibility of the policy. The faster wage and price inflation melts, the shorter the transition and the less the damage. If workers, unions, and employers understand this, their interests in jobs and profits will lead them to speed the disinflation. They must understand above all that the monetary authorities will not give in, will not any longer accommodate persistent inflationary wage and price trends even to reverse recessions and restore employment.

With respect to credibility, the Thatcher experiment in the U. K. is in a much stronger position than the Volcker experiment in the U. S. Mrs. Thatcher speaks for the whole government, and she speaks to the entire nation. Mr. Volcker speaks for one agency, and he speaks to a small specialized clientele. The success of the policy depends on the negotiations, actions, and decisions of workers, union leaders, and businessmen throughout the nation. Most of them do not know who Volcker is, what the Fed is, what M1-B is, or what it all means for their particular jobs and sales. President Reagan has definitely not put his prestige and charisma behind Volcker's threat. To the contrary the President has promised the country disinflation without pain, indeed disinflation during a period of unsurpassed prosperity and accelerating real growth. Volcker's policy can grind away these illusions, but the time and damage required to make his policy succeed will be greater than if the policy enjoyed more credibility and understanding among workers and businessmen.

Even with the enhanced credibility of Presidential sanction, the policy would face tough sledding, as the U. K. example already indicates. Even if a particular union and employer believe and understand the economy-wide implications of monetary policy, whether they disinflate or not depends on whether they think other workers and firms are and will be disinflating. What's the use of accepting

wage increases lower than others have been getting if no one else is going to do so? The purpose of incomes policy, e.g. guideposts with tax inducements to conform, is to engineer a mutually assured disinflation. Making the guideposts decline at the same pace as the targets for nominal GNP growth would bring about disinflation without great damage in extra unemployment and loss of output.

To conclude, I understand and admire the determination of Paul Volcker and his colleagues. I understand why they say that they will persevere in their crusade to eradicate inflation regardless of the transitional costs to the economy. In my opinion, reinforced by observing the British scene, those costs will be very large. I doubt that such a momentous decision should be made by the central bank alone. It should be made by the President and the Congress, and clearly explained to the American people. This would increase its prospects for success, and reduce the transitional damage. But as a further auxiliary to monetary disinflation I would recommend a tax-based incomes policy.

This and other committees of the Congress concerned with monetary and fiscal policies would be well advised to address squarely these large issues of strategy. In comparison, questions of which intermediate monetary aggregates, if any, the Fed should target and which operating procedures it should use to reach those targets are distinctly secondary.

Senator PROXMIRE. Professor Meltzer, will you start us off please? Incidentally, I think I have a copy of your article.

STATEMENT OF ALLAN H. MELTZER, PROFESSOR, GRADUATE SCHOOL OF INDUSTRIAL ADMINISTRATION, CARNEGIE-MELLON UNIVERSITY, PITTSBURGH, PA.

Mr. MELTZER. Senator, I have an article entitled "Tests of Inflation Theories From the British Laboratory" on the British problem and I'm not going to read it or summarize it except briefly to make some comparisons between what went on.

Senator PROXMIRE. Would you like us to have the article printed in full in the record?

Mr. MELTZER. If you would like.

Senator PROXMIRE. We would be happy to include that article in the record at the end of your testimony.

Mr. MELTZER. Senator, I notice you don't have the light that was so familiar from previous hearings, but I will try to stay within the time limit.

Senator PROXMIRE. That's because I have no control over this room at all.

Mr. MELTZER. Let me try to answer the questions that were contained in your letter of invitation.

First, is the monetary approach to economic policy fundamentally sound in theory? Of course, you know my answer to that is yes. I think that the program, which to me means a program of sustained gradual reductions in money growth accompanied by cuts in the growth of spending and in tax rates, is a program that will over a period of 2 years reduce inflation and stimulate the real sector of the economy. I have little doubt that the program will be effective and I think the only doubts one can have about that program is whether, as the costs begin to accumulate, Congress and the administration, of whatever political persuasion, will be willing to remain with the program, to stay with it long enough to get those gains.

During the period of transition, there are things that can be done, I believe, which help to make the program more credible and therefore less costly, and I think some of the things we learned from the British experience help us to understand what can be done to reduce the cost.

Let me begin by describing briefly some of the six major points of what was called the medium term plan that Mrs. Thatcher's government offered when it came into office.

First, there was supposed to be a reduction in money growth measured by a particular measure known as sterling M3. This measure roughly corresponds to one of our broad measures like M2. The plan called for sterling M3 to grow by 9 percent in 1980–81 and 6 percent in 1983–84. That has not been done. Some other constructive steps have been taken in the monetary area but the target for sterling M3 which the Thatcher administration emphasized were not achieved.

As part of her program, Mrs. Thatcher urged the Bank of England to adopt the tactic of controlling the monetary base. After 2 years of negotiation between the Bank—and it's important to understand that

the Bank is not an independent arm of government the way the Federal Reserve is—nevertheless, after 2 years of negotiation, I think a fair assessment of what has happened is that the Bank has moderated its policy in name but not in fact; it continues to aim at interest rate targets and therefore leaves itself open to whatever vicissitudes of the credit market there may be. Although the monetary base has declined and the rate of inflation has fallen, that has been an inadvertent side effect of a policy which was not carried out.

Second, the program sought to reduce the real value of Government expenditure. You mentioned earlier that one of the things which might help would be an incomes policy, but in fact the history of Britain has been one in which private sector wage agreements have not been the problem. Private sector wage agreements are in a range of 4, 5, 6, or 7 percent; well below the current rate of inflation.

The problem has been public sector wage increases. The Government did not have a formal program for public sector wage increases in its first year. Mrs. Thatcher promised when she was campaigning for office that she would accept comparability studies to set public sector wage contracts. In a year in which private sector wage contracts were in the neighborhood of 13 or 14 percent or lower, public sector wage agreements were in the neighborhood of 27 percent.

Those wage payments not only had a very serious effect on the budget, but they also had a serious effect on the credibility of the program. The public did not elect the Conservative government in order to increase the size of the public sector. It elected them to reduce the size of the public sector. Those public sector pay increases were a substantial break in the policy of reducing the growth of Government and transferring resources from the public sector to the private sector.

Mrs. Thatcher campaigned on a program to reduce income tax rates. Immediately after taking office she reduced tax rates. It's interesting to see what happened. The minimum tax rate was cut to 30 percent. The maximum tax rate was cut from 82 percent to 60 percent. Those tax reductions were accompanied by an increase in taxes on consumption so that the effect was not only to reduce the amount of progressivity in the schedule but the aim was to slow down the growth of the public sector. The purpose was to increase saving.

Almost immediately upon their enactment the savings rate in Britain jumped by 2 percentage points and has remained higher than anything achieved in recent years. It seems reasonable to conclude that while the tax changes may not have been the sole cause of that change in saving rate, nevertheless they were a contributory factor. As a contributory factor, they raised the amount of savings in the economy and raised the savings ratio above anything that had been experienced within the previous 5 years.

When combined with the inability to cut the public sector budget and the inability to hold back the public sector pay increases, the combined effect of the program was to finance a deficit at very high real and nominal interest rates without much increase in private investment. The share of income going to investment remained about where it had been in the previous 5 years.

There have been some successes. The rate of inflation was brought down. As you mentioned, the reason for that was largely the result of reducing the growth of the monetary base and allowing the exchange

89-772 O - 82 - 2

rate to float. The tax program stimulated an increase in the savings rate but it was not possible under the circumstances of Britain at that time to get more savings into investment.

In addition to the programs which I have mentioned, Mrs. Thatcher came into office with a program to reduce subsidies to corporations. That program has had what I would have to describe as modest success.

In order to understand the British experience and its relevance for us, one has to understand that many of the problems in Britain differ from ours. When the national Government cuts tax rates, local government expenditures are supposed to be reduced. The local governments, in many cases, don't reduce their expenditure. Instead, they increase what are known as the rates. Those rates are simply local taxes. Many of those taxes fall on businesses. So you have the situation in which the national Government reduces tax rates for business in order to stimulate investment; the budget program doesn't achieve its cuts; the local governments increase the local tax rates and many of those fall directly on business, and so the stimulus to investment from lower taxes isn't there.

Private sector prices are rising at a very much lower rate than the reported rates of inflation. One reason for the difference is that the Conservative government has brought down the rate of growth as a byproduct of the Bank of England's monetary policy. At the same time, efforts to cut the prices or to cut the budgets of some of the public sector monopolies—for example, the British Gas Corporation, a wholly owned subsidiary of the Government—those efforts have not been successful. As the budgets are cut, the British Gas Corporation raises its prices. Now it would take a very fine microscope to find the difference between an increase in those gas prices and the increase in an excise tax on the use of gas. Instead of having the budgets come down in the public sector, the Government has in fact increased taxes, both directly through additional taxes on oil and gasoline and various consumption items and through the behavior in the public sector monopolies. The public sector monopolies have not been controlled effectively by the administration.

To summarize the experience, I would say some things have worked very well. The unplanned reduction in the growth of the monetary base has brought down the rate of inflation. The Government has not succeeded in reducing Government spending. It is now making some additional attempts following the recent Cabinet changes.

We must not stress the similarities between Britain and the United States. Britain has a very different economy from ours. Much of the unemployment, for example, is concentrated in the north. During the previous 5 or 6 years of Labor governments, £9 billion, roughly $18 billion, was spent to modernize and expand industries like steel and automobiles. Under the Thatcher government, an additional £6 billion has been paid to contract those very same industries. One has to agree that one or the other of those expenditures was wasteful—perhaps both were.

The problem in Britain is made much more severe by the fact that the unemployment is concentrated in the north. There are jobs in the south but there are subsidies on rents and to local people, for example, in Liverpool, where the unemployment is approximately 18 percent.

People do not move into London where the unemployment rate is substantially lower or to the southern part of England where there are jobs because of the high housing subsidy and rent control laws. These discourage building in London. The absence of houses in London reduces mobility. There isn't the mobility that we observe from Michigan to Texas as the job mix in the United States changes. We don't find that mobility in Britain, partly because of housing policy which has not been corrected.

So when we look at the high cost that has been paid in Britain to repair some of the damage done during the past 20 years in Britain, we should not extrapolate to the United States. We are a more mobile society and we have had much greater success up to this time in cutting the size of the public sector.

To answer the first question—the first and second questions—have these policies worked; they have produced some gains. They have produced some very high costs. Some of these costs are a result of the policies. Some are the result of structural features in the British economy supported by laws that make it very difficult to obtain the mobility that would be required to shift resources from old industries to new industries.

In looking at the British experience, one must bear in mind one important feature that I hope we will be able to duplicate. Productivities in the industries like steel and automobiles, the old industries in Britain, have gone from very, very low rates or even negative rates to rates of 6 percent maintained for two or three quarters now.

Part of those gains are the result of elimination of overmanning in those industries. Before the recent policy began, people who were unemployed were kept at their jobs by the payment of subsidies. Unemployment was hidden.

One of the effects of the Thatcher program, the Conservative program, has been to get that unemployment out in the open where it becomes a national problem and where constructive action can be taken to reduce it. Some of the people who are laid off in the overmanned industries find new jobs. To that extent, the society is better off not only because the workers find employment with higher productivity but because the productivity of the remaining workers goes up. But some of the unemployed go into prolonged, maintained unemployment, exacerbated by these problems in the housing and other problems, that I have not talked about but will be glad to develop.

It is too soon to say that the program is either a success or a failure. It is a success in some dimensions and certainly much less than a success and perhaps a failure in others.

Can we—and that's the important question—avoid the very high costs? I believe we can. I think there are certain things we need to do at this point.

Instead of having the Secretary of Treasury leaning on the Federal Reserve to ease up on its policy in the face of the first mild increase in unemployment, we should have exactly the opposite response. The administration should be leaning on the Federal Reserve saying:

We support your policy. We want it to be credible. You ought to reduce the money targets for 1981 and begin now to aim at the 1982 target. That way we will reduce the expected rate of inflation and we'll convince people the administration intends to stay on course through this mild recession.

We believe there are other things that the administration can do. It could improve its debt management policy. At the present time the debt management policy is a disgraceful policy. The administration is selling bonds to the public at rates of interest which bet against the policy the administration has announced. No private corporation—no major private corporation—is willing to sell long-term bonds at current rates. The administration does so every month. It creates a set of circumstances which I believe are harmful to the achievement of its policy and which bet against the success of the policy. I believe Congress out to hold hearings on the question of debt management. It ought to lean very hard on the Secretary of Treasury to improve debt management. Better policies are available.

Also, I believe that the administration should come through with a credible forecast of what its policy is going to do. The administration has a forecast. It has a policy. The two have been inconsistent from the very first day. No one knows whether, when forced to choose, the administration is going to increase taxes to balance the budget, inflate or cut expenditures. Everyone knows that it has to make such choices. The administration should produce a credible forecast of what its policy will achieve, both in the reduction of inflation and in the increase in real growth. The increase in real growth will be less than what they have forecast; the reduction in inflation will be greater than what they have forecast, if they sustain their policies. A great uncertainty is whether, before 1985 when the tax structure is indexed, this administration will do what every other administration in the past has done—reinflate to try to balance the budget. That's what the market fears. When the Secretary of the Treasury, at the first sign of difficulty, leans on the Federal Reserve and asks them to increase the growth rate of the money stock, those fears increase.

I believe we can make the costs of disinflating lower. Given the commitment to indexing taxes that we now have, we have to recognize that the tax system will no longer be the vehicle by which the budget can be balanced. That means that there must be not just a temporary holddown in spending but a permanent reduction in the growth of Government spending.

There have been resolutions before the Congress. I believe you were the author of one of them, Senator, to try to reduce the growth of Government or reduce the future deficit, and make it difficult for Congress to vote for deficits. Actions of that kind which tie the Congress and the administration firmly to the current policies are steps which increase the credibility of the policy and lower the social cost of getting from where we were to where we want to be. Thank you.

Senator PROXMIRE. Thank you, Mr. Meltzer.

[The article referred to by Mr. Meltzer follows:]

Tests of inflation theories from the British laboratory

Allan H. Meltzer

The first two years of the Thatcher government have brought neither overwhelming success nor outright failure. A more insistent regard for monetary control and a more effective grip on public spending could however yield lasting benefits

The British elections of 1979 that made Margaret Thatcher Prime Minister and brought the Conservatives to power were perceived everywhere as a decisive shift in direction. The Conservative programme called for reductions in taxes and spending, lower inflation, greater incentives, fewer subsidies and more private responsibility. A mixture of belief, hope and anticipation spread through the financial markets and the business sector when it became apparent that the voters would tolerate, perhaps even demand, a programme of this kind.

Two years later the most vocal critics include those who had been the most jubilant. The Confederation of British Industries, much of the financial press, many in the City and members of the government privately and publicly criticise the government's policy and favour a less austere, less costly, more humane way of reducing inflation, expanding the economy and increasing incentives.

Inflation has continued in Britain for more than twenty years. During this period, output (gross domestic product) rose at an annual average rate of 11 per cent a year, but consumer prices rose more than 8 per cent, and real output rose less than 3 per cent on average. The rate of growth of real product is slower in the second ten years than in the first, and the rate of price increase is faster. Output rose at an average rate of 14·8 per cent in the seventies, but consumer prices rose by 12·5 per cent and real output rose by little more than 2 per cent a year.

The ten-year averages, of course, mask considerable year to year variation. During the sixties the annual rate of increase of consumer prices was never above 5·5 per cent. For the seventies, the annual increase was never less than 6 per cent and in four of the ten years exceeded 15 per cent.

The decade average rates of increase are useful for measuring inflation — the sustained rate of increase in a broadly-based index of prices. Annual rates of price change vary around the average and are a much poorer measure of inflation. The most important differences are the result of one-time changes in the price level that follow large changes in oil prices, devaluations or revaluations of the currency and the imposition or elimination of the distorting influence of price controls. Temporary reductions in the rate of inflation that occur during postwar recessions, but have not been sustained, are another cause of differences between annual rates of price change and the sustained rate of inflation.

Currently, there is a recession in Britain. The slower rate of price increases observed in recent months may not persist; the sustained high rate of inflation of the seventies may continue into the eighties. Firm conclusions about the final success, or failure, of the policies of the Thatcher government cannot be drawn until after the economy recovers.

Some preliminary conclusions do not depend on the ultimate success or failure of the government's plan, however. It is not too soon to compare promises with initial performance, to see where the government has carried out its programme, where it has reneged or so far failed to accomplish its announced aims, and to look into the reasons for initial successes or failures. The British experiment offers a test of several current explanations of inflation, so it is useful to look at the early results of the test to see what can be learned about the explanations and about the

TABLE 1 THE BRITISH EXPERIENCE
Average rate of change

(% per year)	1953-69	1969-70
Money (M1)	3·0	13·0
Consumer prices	3·4	12·5
Real gross domestic product	3·1	2·1
Employment	0·5	0·1
Value of exports	5·9	17·8
Value of imports	5·7	17·8

Source: Federal Reserve Bank, St. Louis

ability of democratic countries to end stagflation, an affliction common to many countries.

Sustained inflation in Britain kept pace with the rate of increase in the money stock, currency and checking deposits — M1. Table 1 shows that the decadal average rates of inflation for the sixties and seventies are within 0·5 per cent of the average rates of growth of money for the same periods. Real output rose faster in the earlier than in the later decade. Employment rose more slowly in the seventies, so the average growth of output per employed worker differs by only 0·5 per cent in the two periods.

Major policy changes

Slower growth in the seventies occurred in many countries, and the decline in the growth of output per man in Britain is much smaller than in Germany or Japan, countries with much lower rates of inflation. Rates of change of exports and imports, in current prices, increase by almost identical percentages from the sixties to the seventies, so inflation has little effect on the real value of the trade balance. In fact, the 9 per cent to 10 per cent increase in the average rate of inflation has little discernible effect on any of the real variables in the table. Whatever effects occurred are hidden by the averages or broad aggregates.

The economy that Mrs Thatcher's government inherited in the spring of 1979 was operating close to the averages for the decade. The new government announced a medium-term programme to increase real growth and reduce inflation. Six major policy changes — the medium-term plan — were announced.

1 To slow inflation, the government proposed a gradual, sustained reduction in the rate of growth of money to an average of 9 per cent in 1980-81 and to 6 per cent in 1983-4. A broad measure of money that includes time deposits, known as sterling M3, was chosen as the target.

2 To slow the growth of government, the plan called for a reduction in the real value of government spending of approximately £3·5 billion below the 1979-80 budget. A reduction of this magnitude would reduce real government spending (at 1979 prices) by 5 per cent in four years.

3 Increased incentives were given for private saving and for investment. Marginal income tax rates were reduced from 33 per cent to 30 per cent for the lowest bracket and from 83 per cent to 60 per cent for the highest bracket. Other tax adjustments were made to encourage investment.

4 To keep the deficit from rising precipitately following the tax reductions, taxes on consumption were raised. The targets for the public sector borrowing requirement for 1979-80, and 1980-81, including the central government deficit and borrowing by public corporations, were set at £8·5 billion and £7 billion (at 1978-79 prices) respectively.

5 Subsidies for state enterprise and private corporations were reduced, and publicly held shares in several state enterprises were to be sold.

6 In October 1979, exchange controls were removed. Britons were permitted to invest in foreign securities without restriction.

The government proposed the type of 'monetarist' programme advocated by the Shadow Open Market Committee and the Banking Centre at London's City University — floating exchange rates, gradual reductions in the growth of money, cuts in government spending and in tax rates. Reductions in marginal tax rates were described by the Treasury, the press and many commentators as 'supply-side' or incentive tax cuts introduced to stimulate real output.

There has been little effort to confront the unions or to break their power. The government has eschewed wage and price controls, guidelines and interference in collective bargaining. Even at nationalised firms, unions were expected to bargain with management, not with the prime minister. Occasionally, threats were made or legislation was introduced to permit competition in public services, such as mail delivery, but these actions were taken or proposed to increase efficiency, not primarily to reduce the political power of the trade unions. Recent political developments in the Labour party have increased the power of union officers within the party.

The first two years under the Thatcher government brought neither overwhelming success nor outright failure. Inflation slowed, to the lowest rate in many years, but has increased. Unemployment increased and is now at the highest rate in many years. The share of income saved increased, dramatically, but the share of income invested in plant and equipment remains close to its recent average.

Renewed surge

Mrs Thatcher's government has not been able to control public spending or the size of the public sector borrowing requirement. As the chart shows, the borrowing requirement* declined shortly after the Thatcher administration took office, but the decline did not last. Failure to reduce the growth of spending, combined with the loss of revenues during the recession, contributed to the renewed surge in the borrowing requirement in 1980. Of the two causes, the failure to control spending is, by far, the more important because it shows a failure to carry out the government's programme and because it suggests that the budget deficit will be closed only, if at all, by future tax increases. The government has moved in that direction by increasing taxes on oil.

In fact, the budget position is worse than a quick glance at the borrowing requirement shows. A careful reading of the government's planned spending in its

*The principal difference between public sector borrowing and central government borrowing is borrowing by public corporations.

first full fiscal year shows little evidence of an effort to cut spending permanently or to reduce the size of the public sector. There are four clear signals.

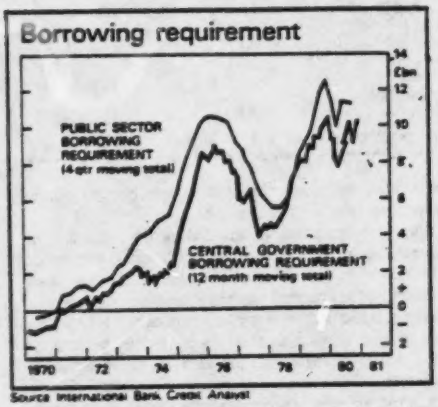
First, the government did not cut spending on government consumption or transfer payments but proposed to increase the share of spending in these categories relative to the budget. The 1980 budget asked for an increase of almost 19 per cent in total government expenditure on current and capital account. Spending for government consumption of goods and services was scheduled to rise 23 per cent and grants to persons, transfers, by 19 per cent. The two items — government consumption and transfers — include 72 per cent of total spending. By allowing these items to increase relative to the budget and relative to gross domestic product, the government raised doubts about its determination to carry out the reductions in the relative size of government and in future tax rates. A central feature of the medium-term strategy to reduce inflation and increase the growth of real incomes was placed in doubt.

Not outstanding

Secondly, subsidies to business and housing and capital spending are the sections of the budget in which relative reductions are largest. The 1980-81 budget continued the trend that started in 1975. From 1975 to 1979, the share of spending for subsidies declined from 7·2 per cent to 4·8 per cent. The Thatcher government cut another 0·4 per cent, a desirable but not an outstanding performance. Similar comments apply to the reductions in spending for capital formation. Further, much of the capital spending is deferred, not eliminated.

Thirdly, the government has not taken decisive action to reduce the size of the civil service. An announced reduction of 50,000 jobs planned by the previous Labour government included elimination of no more than 10,000 current positions. Failure to reduce government employment and the rate of increase of government wages is a major failure. The failure is remarkable in view of the relatively large size of the public sector. Table 2 shows cross-country comparisons of the approximate share of the labour force employed in the public sector. While such comparisons are not precise, the difference between Britain and other developed countries is striking. A reduction to the US ratio, 15 per cent, would remove more than 1 million public sector jobs.

Fourthly, the budget submitted in March 1981 surprised many forecasters by providing for tax increases instead of the U-turn in policy that had been discussed widely. The government proposed tax increases to show its continued commitment to the medium-term strategy. The strategy called for the decline in the borrowing requirement to be achieved together with a smaller public sector, however. Tax increases to support an unchanged, or larger, public sector call into question the commitment to reduce the relative size of government.



Source International Bank Credit Analyst

Failure to reduce government spending raises doubts about the government's ability to control inflation. Inflation has fallen, particularly in recent months. The problem people face is deciding whether the reduction is permanent or temporary.

The problem arises because inflation has been reduced in the past. As recently as 1978, consumer prices rose only 8·3 per cent, but that performance was preceded by a 16 per cent, and followed by a 13 per cent, rate of interest. What reason do people have to believe that the Thatcher government will succeed where others have failed?

So far, they have not much on which to base their faith other than the almost visible determination of Mrs Thatcher. Against her image as a strong, committed leader, stands considerable past experience and three currently disturbing items. One is the past record of central bank policy in Britain and the United States, a record that shows no evidence of sustained commitment to anti-inflationary monetary policy. Another is the combination of fiscal and monetary policy; central bankers complain frequently about the size of public sector deficits, but just as frequently they finance a large part of each deficit, increasing money growth in the process and building a base for higher inflation. A third disturbing item is the rising political pressure, particularly from large firms in the public and private sectors and from members of the Cabinet, to moderate or reverse the announced policies.

The main problems with central bank policy in Britain (and the United States) arise because of the central banker's excessive concern about interest rates and the frequent neglect of money growth. Targets for money growth may be announced, and strong commitments made to monetary control, but practice differs from promise. When total demands for bank credit by government and the private sector decline, open market interest rates fall. Central banks can delay the fall by slowing money growth, and they generally do. Money growth collapses as we enter

TABLE 2: SHARE OF LABOUR FORCE IN PUBLIC EMPLOYMENT

Country	Year 1950	1960	1970	1980*
Britain	12·1	12·6	16·4	20·7
France	6·5	9·3	11·4	13·4
United States	8·7	10·9	14·1	15·3
West Germany	n.a.	6·6	8·8	11·5

Source: United Nations. e is UN estimate for 1980.

recessions, and since the error is symmetric, money growth soars during expansions.

The problem arises — and cannot be avoided — if central banks continue their traditional approach. The reason is that no one can predict interest rates accurately. In current jargon, interest rates are a random walk; or, in simpler language, there is no information in past interest rates, money growth or other variables that can be used to make accurate forecasts. One must guess, or forecast, future economic activity, budget deficits, balance of trade, inflation and other variables and use these forecasts to predict future interest rates. If central bankers could forecast reliably, there would be much less difference between policies to control interest rates and policies to control money. They would achieve their targets for money growth.

The persistent pattern of errors is revealing. The fact that money growth is above targets during periods of expanding real activity or surges of government borrowing suggests that central banks underestimate demands for credit when credit demand rises; they set interest rates too low and allow money growth to exceed the announced targets. Like the rest of us, they cannot know at the time whether the excess growth of money is persistent or temporary.

If they treat the excess growth as temporary, and it persists, there is a surge of unanticipated money growth, increased demand for borrowing at prevailing interest rates, new fears of inflation and a further diminution of the dwindling stock of central bank credibility. If they guess or forecast correctly, there is no error. Money growth remains under control. It is the failures — failures that cannot be avoided if central banks set target rates of interest — that have caused central banks to become the engines of inflation and recession in Britain and in the United States.

Related problems

Recent British experience shows how the process works in Britain. The Thatcher government failed to reduce the growth of public spending. The public sector borrowing equipment exceeded its target by a large amount. The central bank kept the interest rate at which banks borrow constant, so £M3 exceeded its target. Since the central bank can never control both interest rates and money growth, setting the interest rates allows the market to determine the rate of money growth.

Excess public spending, larger than expected budget deficits and the growth of money in excess of target are related problems. The relation would disappear, if the central bank changed its operating procedures and permitted market rates to fluctuate as much as is required to control money. The excess deficit would then be financed by domestic saving or by foreigners, but money growth and inflation would fall.

Poor indicator

A major problem of reducing inflation in Britain, and in the United States, results directly from central bank policy. Now that the recession has ended, money growth — measured by the monetary base and M1 — is rising. Continuation of high money growth implies that the high price paid to reduce inflation in 1980 and 1981 will not produce a lasting reduction in the growth of money. People have learned, from past experience, that money growth is higher in recovery than in recessions, so they now anticipate the surge in money growth and inflation. Anticipated inflation remains high and cannot fall until there is evidence that central policy will reduce the growth of money during the expansion that is now under way. Continuation of traditional monetary practice means that inflation will rise in 1982.

My claim that central bank policy prevented money growth from falling in 1979 and 1980 raises an important question. Why did the rate of inflation decline from 13·4 per cent in 1979 to 8·5 per cent in the third quarter of 1980?

A glance at the chart on page 26 shows that there is no evidence of any sustained reduction in the growth of sterling M3, the measure of money that the Bank of England and the government use to describe monetary policy. The mid-point of the target rate of annual money growth for 1980-81 was 9 per cent; the twelve-month growth rate for 1980 was 20 per cent. More importantly, there is no evidence of any sustained reduction in the growth of this much-discussed aggregate at any time in the recent past.

There are two reasons why sterling M3 is an exceptionally poor indicator of recent monetary policy. One is well known; changes in technical regulations caused a re-classification of bank liabilities and a large increase in sterling M3 in the summer of 1980. Few observers believe that the annual growth rate of money is as high as 20 per cent or believe that the large jump in measured growth during the summer of 1980 will cause an equivalent jump in prices.

The second reason tells a great deal more about the effects of recent policy in the British economy. In 1979, the Thatcher government reduced income taxes and raised taxes on expenditure shortly after taking office. The effect of this shift in taxes, reinforced by subsequent increases in excise taxes, is to shift some of the tax burden from income to consumption. For those in the highest marginal tax brackets who paid from 65 per cent to 83 per cent of their taxable earnings above £14,000 as taxes in 1978, the tax shift increased the incentive to save and earn.

Saving has increased — both absolutely and relative to income. In the four quarters before the tax change, Britons saved less than 13 per cent of income after taxes; in the next four quarters, the average saving rate was close to 15 per cent. The recent rate is at least two percentage points higher than in any of the past five years.

There was no comparable increase in capital spending for plant, equipment and housing. In the four quarters before the tax change, the share of British GNP invested in fixed capital — including replacement was 17·6 per cent. During the next four quarters, the average share was 17·9 per cent. Both numbers were below the average for the previous four years.

Not matched

The additional share of income saved was not matched by additional investment in plant and equipment. Private sector sterling time deposits increased 25 per cent in 1980; this increase, more than £9 billion, is far larger than the additional saving that followed the shift in taxes from income to consumption. The high growth of sterling M3 was more than sufficient to absorb all of the additional saving stimulated by the tax shift.

Most measures of money growth convey similar information about monetary policy and future inflation, once allowance is made for differences in trend. Deviations from trend are generally in the same direction and occur at about the same time. Regulations and structural changes may alter the relations between the growth rates and most observers are familiar with the periodic distortions caused by regulation of interest rates in the United States. Tax policy appears to have caused a similar distortion in Britain.

The higher saving ratio in Britain added much more to time deposits, included in sterling M3, than to (non-interest bearing) demand deposits or currency, the principal components of M1. M1 and the monetary base — bank reserves and currency — show very similar patterns. Growth of M1, the monetary base and other indicators that exclude time deposits declined markedly in 1980. The growth rate of the monetary base for the year ending in the first quarter of 1979 was 14·8 per cent; by the fourth quarter of 1980, the annual growth rate of the monetary base had fallen to about 5 per cent.

High interest rates reduced the growth of base money and stimulated the demand for savings deposits. The increased saving, following the tax change, flowed into the banks as savings deposits, raising £M3 relative to M1.

Slavish attention to sterling M3 has hidden the substantial deceleration of money growth from public view, from the Bank of England and the government. The financial press, economists and others have called attention repeatedly to the government's failure to reduce money growth. These comments and criticisms neglect the effect on the growth of time deposits and sterling M3 of the increased rate of saving. Monetary policy in 1980 was substantially less inflationary than is commonly recognised. And the rate of inflation fell sharply, after more than a year of anti-inflationary monetary policy.

A common view in Britain and the United States is that inflation occurs because monopolists raise their prices. The most commonly cited monopolists, particularly in Britain, are the trade unions, and a common, or widely repeated, view teaches that inflation cannot be reduced until the power of the unions is curtailed. Sophisticated versions of the argument recognise that unions cannot create inflation without the help of the government or the central bank. Unions are said to 'cause' inflation, however, by raising wage demands excessively, creating unemployment and forcing the government to expand money growth and increase inflation to reduce real wages and restore employment.

Mrs Thatcher's government has not chosen to confront the unions and has either postponed or rejected efforts to pass legislation that reduces the power of the trade unions. Yet inflation has declined and so has the rate of increase of money wages. The annual average rate of real wage increase for the first three-quarters of 1980 remained between −0·5 per cent and +1·5 per cent, not very different from the average rate of increase in 1979. More importantly, the average rate of increase of real wages is not strikingly different from the average productivity growth of 1·5 per cent in recent years.

Main reason

Neither measured productivity growth nor increases in real wages has adjusted smoothly to the anti-inflation policy. Unemployment increased, in part the result of layoffs and firings in the over-manned, nationalised industries, in part the effect of recession. But the government has not invoked guideposts or imposed formulas for wage and price changes, and Mrs Thatcher has given evidence of her intention to continue the anti-inflation policy without relying on any type of direct pressure.

Private sector unions have reduced their demands, following the reductions in the rate of inflation. Unions in the public sector and civil servants have gained relative to the private sector. These gains in public sector wages are a main reason that the

government budget and the public sector deficit have continued to rise.

A second conjecture about government policy, known as 'supply side economics', has attracted a following in the popular press. No careful statement of this position has appeared, as far as I know, but a number of popular versions exist.

The main point emphasised by supply-side economists is the stimulating effect on real output and employment that can be had if marginal tax rates are reduced. The correctness of this point is not in dispute. The patron saint of classical economics — Adam Smith — would be pleased to learn that this ancient wine has been repackaged in a form acceptable to modern politicians.

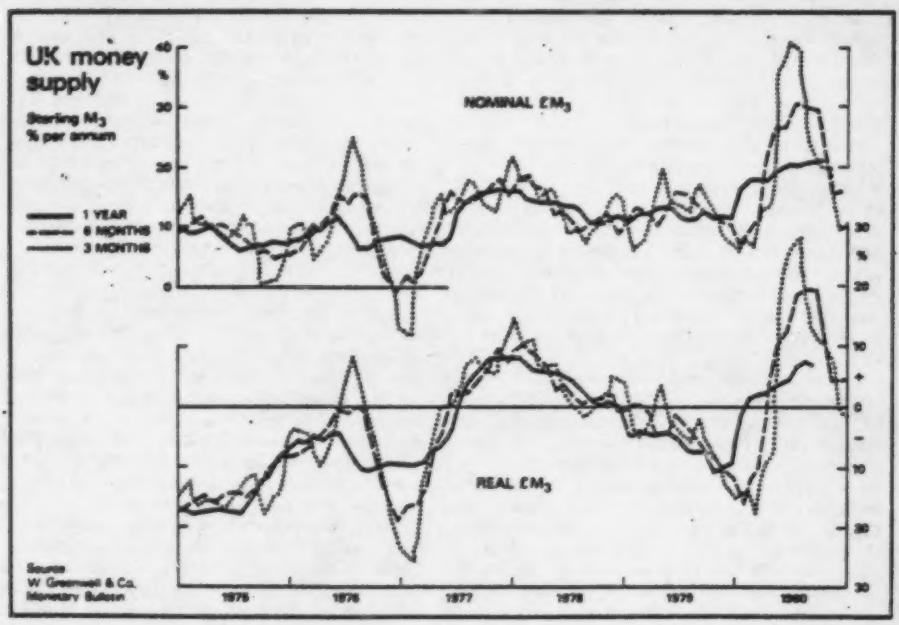
Basic point

No economists should deny that an increase in real and after-tax returns to labour or capital increases the amount of these productive factors offered for sale. The point is basic to economics. The problems start when we try to follow the rest of the argument, particularly the parts about government spending and inflation. Supply-side economists emphasise tax cuts, often deny the importance of spending cuts, and suggest at times that a reduction of marginal tax rates is an anti-inflation policy. The argument is that as output increases, spending and the quantity of money demanded increase. With constant money growth and faster growth of real output, inflation falls.

Spending reductions are not emphasised in the theory of supply side economics, but the reasons are not entirely clear. Higher real growth raises the level of real income. If government spending grows at an unchanged rate, the share of output allocated, or transferred, by government falls or rises more slowly. Unless there are rapid, dramatic changes in real growth, a large part of the tax reduction is temporary, not permanent, and has no lasting effect on the allocation of resources.

The sizeable reduction in marginal tax rates in Britain has not had the effects predicted by supply side economists, at least not yet. Saving increased relative to income, but investment did not. The deficit did not decline. Inflation declined following the reductions in money growth and despite a temporary decline in the growth rate and level of output. The economy went into a recession, not the expansion that was supposed to follow the tax cut.

No doubt some clever supply side economist will find a clever explanation. Perhaps failure to reduce the growth of government spending aroused scepticism about the permanence of the tax cut. Perhaps people believe that the government's real claim on real resources is measured more accurately by the amount government spends than by the amount currently paid in taxes. Perhaps people remain sceptical about the extent to which government will reduce inflation if the budget deficit rises and the central bank continues to announce, and



ignore, target rates of increase for money growth.

These adjustments to supply side economics, if they are made, bring supply economics closer to British experience and mainstream monetarism. The adjustments remove many of the unique features of supply side economics including the free lunch offered to politicians, and by politicians, who urged tax cuts without budget cuts and offered to end inflation without reducing money growth.

Inflation fell in 1980. There is no doubt about that. Even those who describe the policy as flawed or failed do not dispute this fact. But they do not go from the fact of lower inflation to the reasons for this partial success or the reasons why the cost of reducing inflation has been high. One reason is scepticism about the future of the policy. The rise in the pound, the high rates of interest, high unemployment and a larger than anticipated deficit, under the old rules, meant a change in policy. No one has an alternative policy that will work more effectively, but that does not stop the critics or make the continuation of the medium term strategy, with renewed effort to cut the budget, more secure.

No offsetting effect

No less important is the misunderstanding of the mechanism through which inflation has been reduced. Critics of the policy tend to think in simple Keynesian terms and, therefore, misinterpret what has happened. The slower rate of price increase in 1980 is both a cause and an effect of the appreciation of the pound against most major currencies. Appreciation reduces the domestic price of imports, and if slower money growth accompanies the appreciation, there is no offsetting effect on domestic prices and the rate of inflation falls. Because the growth rate of money fell as the pound appreciated, expected inflation fell. People are now willing to hold more money at a given level of income.

Sterling appreciated against the dollar in 1977, 1978 and 1979. The rate of appreciation did not increase in 1980, but the reasons for appreciation have changed. The removal of exchange controls and the higher saving rate in Britain permitted Britain to finance a large budget deficit with domestic saving and foreign capital. At the same time, saving rose both in absolute level and relative to income. The reduction of spending affected spending on foreign as well as domestic goods, so the appreciation did not lead to a trade deficit. Slower growth of the base contributed to lower inflation by reducing the expected rate of inflation. Oil helped by reducing imports and attracting investment in North Sea oil.

Oil is not a new force affecting the pound and the price level. The difference between 1980 and earlier years is that the rate of price increase fell as the pound appreciated. To explain the difference, we must look to monetary policy.

It is strange — but accurate — commentary on the procedures of the Bank of England that the reduction of inflation was an accident. Undue attention to interest rates kept the minimum lending rate higher than was required to slow the rate of price change. The lower rate of price change and high rate of interest attracted saving and capital inflow to finance the budget deficit at a high real rate of interest. The rate of interest is too high to permit the economy to prosper, so the recession is worse, but the inflation is lower than anyone anticipated eighteen months ago.

The problem now is to bring about a recovery without increasing inflation. Experience in Britain, in the United States and elsewhere suggests this will not happen unless the Bank of England gives up its effort to control interest rates and turns its attention to controlling the monetary base. The Bank must restore its credibility and in doing so restore confidence that the costly recession will produce lasting benefits.

Britain has paid too high a price to reduce inflation, but the costs are not all sunk costs. And all the costs are not the result of monetary policy. Reduced subsidies to nationalised industries made hidden unemployment visible.

Mrs Thatcher's government must show the courage, determination and judgment to get the gains that they have paid for. Budget cuts, not tax increases, monetary control, not money market myopia, can tilt the cost-benefit ratio and make the policy produce lasting benefits and gains for everyone. A continuation of current policies and the current system of monetary control will bring back high inflation and slow growth.

Senator PROXMIRE. Mr. Laidler.

STATEMENT OF DAVID LAIDLER, PROFESSOR OF ECONOMICS, UNIVERSITY OF WESTERN ONTARIO, LONDON, ONTARIO, CANADA

Mr. LAIDLER. I brought with me, Senator, a prepared statement, and also a longer paper called "The Case for Gradualism," which I believe you have on the desk in front of you.

Senator PROXMIRE. We'll be happy to have that printed in full in the record, and if you would give us your summary, then we can get to questions.

Mr. LAIDLER. I will give a short summary of my prepared statement, particularly since Professor Meltzer has left me with not too much to say. I think we are in agreement on most matters. [Laughter.]

First of all, it's important to be clear what we mean by monetarism. By monetarism, I mean a policy of controlling the rate of growth of some representative monetary aggregate to bring the inflation rate under control, and that is all.

In the British context, the word monetarism has got all kinds of broader political overtones having to do with reduction of the size of the Government sector and all the rest of it. Though I believe we could argue about the desirability of the latter, I nevertheless think that this represents a logically distinct set of issues and is not really part of what I mean by monetarism.

Now to turn to the theoretical soundness of monetarism: certain conditions, I believe, have to hold for monetarist policies to work and I think we are all familiar with them; stability of the demand for money function, sensitivity of the inflation rate to aggregate demand, and to inflation expectations, sensitivity of inflation expectations to the experience of inflation, and not least, of course, the ability of the monetary authorities to control the growth rate of some representative monetary aggregate.

Now I believe that all of these conditions do in fact hold in the United States as much as in Britain, so I do believe that monetarist policies are well conceived, but two or three things have to be said by way of qualification there.

First of all, though the components of monetarism theory are all rather well tested, I do not believe that we have seen a full-fledged experiment with the whole policy package, so in implementing monetarist policies in any country the authorities are taking something of a step into the dark.

The second thing that I would say by way of qualification is that there is a good deal of empirical evidence that suggests that although inflation does respond to aggregate demand, it does so rather slowly. I say that in full awareness of policy pronouncements based upon the rational expectations hypothesis which argue that an announced change in policy in and of itself can make a difference to the ongoing rate of inflation. I believe that those arguments are theoretically sound, but I don't think they stand up very well in the light of the empirical evidence and I don't think it's a good idea to base policy on hopes that might be raised by that type of argument.

Now I would like to turn to a brief discussion of the United Kingdom experiment. Like Professor Meltzer, I don't think that it's a very

good experiment in monetarism, to put it mildly, although the Thatcher government may have been sincere in announcing their monetary growth rate targets and so on when they were elected.

I believe that the fundamental problem in the British case was the attempt to put monetary growth rate targets for sterling M3 into place when the framework of banking and monetary regulation, the so-called competition and credit control system, simply was not designed to make it possible to control the rate of growth of an aggregate such as sterling M3 through base control.

The authorities tried instead to get to grips with the behavior of the monetary aggregates by way of manipulating interest rates and while the authorities were doing that they simultaneously changed certain regulations on the banking system, exchanged controls, and the so-called corset restrictions on certain kinds of bank borrowing. Thus they actually changed the meaning of the monetary aggregate whose growth rate was to be controlled while the targets were being put in place.

The problem with interest rates control on sterling M3 I think is quite easily explained. Sterling M3 is a broad monetary aggregate. Many of the marginal items in it bear interest at market rates of interest so that there is not the well-defined sensitivity of the demand for sterling M3 to the rate of interest which would be necessary for interest rate control methods to have any hope of succeeding.

As a consequence of this, when monetary policy tightened up in the United Kingdom, at some time in 1979 and into 1980, there was actually a perverse effect on the growth of sterling M3 from rising interest rates. Interest rates were increased and the private sector substituted into assets which were in sterling M3 from the demand side and sterling M3 began to grow well above target and the Government responded to this by further tightening interest rates.

I believe they were misled by looking at sterling M3 as to what was happening to monetary policy. If you look at the narrower M1 aggregate, the growth rate dropped very radically in 1979 and stayed down in 1980, I believe monetary policy was much tighter than the United Kingdom authorities intended in 1979 and 1980. I would add to that that the direct tax increases, which Professor Meltzer alluded to, put 4 percentage points on the price index more or less in one afternoon and, of course, 4 percentage points onto the price index is equivalent to a 4 percentage point cut in the level of money supply. That is another reason for believing that monetary policy was, in fact, much tighter than was intended.

Now I have no doubt whatsoever that this tight money policy in the United Kingdom has contributed to the very bad performance of the real side of the British economy over the last couple years, but I think it is very important to recognize that there have been other important local factors at work. Professor Meltzer has alluded to the restructuring of British industry that is now going on. I think there's no doubt that, for the last 10 years, successive governments have been subsidizing and propping up firms and industries, both in the public and the private sector, which it might have been better to permit to contract. Those chickens have come home to roost with a vengeance in the last couple years.

These have nothing to do with the monetary policy. These are adjustments that the British economy would have had to undergo no matter what the stance of monetary policy.

The second important local factor is the development of North Sea oil. Britain has gone from being an economy which imported all its oil to an economy which is now, I believe, a little more than self-sufficient in oil in a space of 4 or 5 years, and at a time when until very recently world oil prices were rising very rapidly. This has had a marked impact upon Britain's terms of trade and upon the balance of payments. No matter what monetary policy was in place, British manufacturing industry, particularly in the export and import competing sectors, was bound to have a very hard time of it.

At this time last year it looked as though the terms of trade had shifted between 30 and 40 percent in Britain's favor as a result of North Sea oil and as a result of the monetary policy. The recent depreciation of sterling has taken some of the edge off that. But again, I would stress that there was bound to be a need for a considerable restructuring of the British economy as a consequence of North Sea oil.

The British economy is marked by an almost total lack of geographical labor mobility, largely—I agree with Professor Meltzer—because of longstanding policies in the housing market. If you add that to the restructuring of British industry and North Sea oil, I think you have to agree that a great deal of the bad performance of the real side of the British economy comes from those factors and that the monetary policy has simply come on top of their effects.

Nevertheless, there is some reason to believe that the monetary policies have worked on a very narrow front. The inflation rate has come down very rapidly and I believe much more rapidly than most forecasters were willing to predict 12 months ago, and indeed the inflation rate in the United Kingdom would be well into single digits now had it not been for the operations of the nationalized industries that Professor Meltzer has talked about.

To give some idea of the order of magnitude, in the last statistics which I looked at, which were for July of this year, the year-to-year inflation rate for the economy as a whole was about 11 percent. Nationalized industry prices had risen by about 25 percent over that same period. So the private sector was well into single digit inflation.

Now I don't in my notes get into great detail about recent U.S. economic history, but I do draw one moral. The moral is that the British case is a special case and I can see no particular reason why the United States need encounter the same difficulties with implementing monetarist policies which the British have encountered.

The Federal Reserve, as Professor Meltzer has suggested, is much more independent than the politicians. Appropriate monetary control mechanisms are more or less in place in the United States. The United States does not have North Sea oil. The United States does not have the history of subsidizing inefficient industries on the same scale as the United Kingdom has, and so I think that the United States can press ahead with a policy of monetarist gradualism, if that's what it wishes to do, without having to look at the United Kingdom for warnings as to what is likely to happen.

Thank you.

[The prepared statement of Mr. Laidler, together with the paper referred to, follows:]

Prepared Statement of David Laidler

1. It is important to be clear at the outset about just what one means by the word "monetarism". I treat it in the current context as indicating a policy of attempting to control the behaviour of the general price level by way of manipulating the rate of growth of some representative monetary aggregate. More specifically, it is a policy of attempting to reduce the rate of inflation by reducing the rate of growth of that monetary aggregate; and thereafter of attempting to maintain price stability by maintaining a constant growth rate for the money supply, a growth rate chosen so as to be consistent with the underlying real growth rate of the economy. In the public mind, in the United States as much as in Britain, monetarism is associated with generally conservative political philosophy which views the reduction of the role of government in economic life as a desirable goal. There is no logical connection between monetarism and a generally conservative attitude to economic policy, and its soundness can be assessed on logical and empirical grounds independently of any ideology.

2. In order for monetarist policies to work, the economy must possess certain properties. The demand for money must be a reasonably stable function of a few arguments; the rate of inflation must

be responsive to the level of aggregate demand ruling in the economy; the rate of inflation must also be responsive to expectations about inflation, so that, when "full" or "natural" levels of employment and output hold, prices grow at the expected inflation rate; inflation expectations must respond to experience in such a way that any sustained constant inflation rate eventually comes to be fully anticipated; and finally, it must be possible for the monetary authorities to control the rate of growth of some relevant monetary aggregate.

3. As I have argued in a recent paper entitled "The Case for Gradualism" these conditions do seem to hold, or in the case of the controlability of the money supply, could be created, in just about any modern market economy and certainly in the United States or Britain. However, one or two caveats are in order here. First, though the individual components of the case for monetarist policies have been extensively studied by economists, the world has not yet witnessed anything remotely resembling a clearcut experiment in applying a monetarist policy package, so that its implementation must necessarily involve something of a step into the dark. Second, there is reason to believe that certain crucial linkages in the transmission mechanism of monetary policy are rather slow moving, notably those which run from aggregate demand to inflation. In particular although the "rational expectations" hypothesis implies that there might be rather quick acting links between the adoption of contractionary monetary policy and the inflation rate by way

of what used to be called "policy announcement effects" on expectations, I regard these implications as being of more theoretical interest than practical importance.

4. It may well be that, after October 1979 the United States, and after May 1979 the United Kingdom, did in good faith attempt to implement "monetarist" policies, but if so the attempts have failed at the implementation stage. In each case, there have been severe gyrations in monetary growth rates with associated instability in interest rates, exchange rates, as well as in real economic activity and prices. Since I believe that it is technically possible for the monetary authorities of either country to control the rate of growth of the money supply, I attribute this failure to technical errors on the part of the authorities in both countries, rather than to any fundamental flaw in monetarist policy prescriptions, though it is only fair to note that there are many economists, particularly in Britain, who would dispute this judgement.

5. I am not sufficiently acquainted with the details of the United States experiment to pass a fully informed judgement on what went wrong there, and so I will confine myself to dealing with the British case. There I believe that the authorities made the fundamental error of setting target growth rates for a particular monetary aggregate - sterling M3 - without putting in place a mechanism of monetary control that would enable those targets to be attained. Moreover, at the very time

89-772 O - 82 - 3

at which the targets were set, the authorities took certain other measures, such as the abolition of exchange controls and of the so called "corset" restrictions of aspects of commercial bank borrowing, which actually changed the meaning of the aggregate in question and distorted its growth rate. The upshot of all this was that attention was focussed on sterling M3, whose growth rate gave a misleadingly lax impression of the stance of monetary policy at the very time when, had attention been paid to other indicators, notably for example the growth rate of the much more narrowly defined M1, it would have been seen that monetary policy was becoming extremely tight.

6. The key problem in the British case has been that the so-called "Competition and Credit Control" system of bank regulation made it infeasible to attempt to control the money supply by way of manipulating the monetary base. Interest rate control methods, not unlike those used in the United States before October 1979 had to be used instead. However, many assets included in sterling M3 bear interest at market determined rates. Thus a well defined interest sensitivity of demand for money, which must be a sine qua non of interest rate control methods, was probably absent. When short term interest rates were increased in an attempt to slow down the rate of monetary expansion substitution both out of narrow money and perhaps out of longer dated securities as well, caused the rate of growth of sterling M3 to increase temporarily. However this effect, which was also present at other earlier turning points, appears to have

been misread by the authorities who countered by further interest rate increases. One suspects that, had interest rates increased by less in Britain in 1980, sterling M3 might have grown by less rather than more; though without detailed empirical work on the episode this must necessarily remain a conjecture.

7. Reliance on interest rate control mechanisms in Britain has led to a broader and in some ways more significant flaw in the monetarist experiment there. Given the difficulty of controlling a broad aggregate with interest rate control methods, and given an institutional framework which makes base control impossible, it becomes tempting to use fiscal policy, not as a tool in its own right, but as a means of hitting monetary policy targets. Why this should happen is easily seen. For a given level of interest rates there is a certain quantity of public sector debt which the private sector of the economy will absorb over a particular period. The difference between the public sector borrowing requirement and this amount must therefore be borrowed from the Banking system and hence is a source of money creation. Thus control of the public sector borrowing requirement comes to appear to be a pre-requisite for controlling the rate of monetary expansion. This is exactly what has happened in Britain with what I believe to have been adverse effects on many aspects of government economic activity, many of the latter stemming from the government's inability quickly to bring public sector pay and the losses of certain Nationalised industries under control while being politically committed

to lowering income taxes at the time of their election.

8. The foregoing argument has suggested that the stance of monetary policy in Britain in 1979-80 was much more contractionary than the authorities intended. This factor must have played an important role in generating the current very deep recession in that country. It ought to be noted, though, that the inflation rate in Britain has come down in the last year so, much more rapidly than most people expected. It has fallen from a year on year peak of 22% last summer to about 11% at present, while the private sector components of the price index show an inflation rate that is well into single digits. It is nationalised industry prices, which have risen by about 25% in the last year which are mainly responsible for keeping the British inflation rate in double digits.

9. I have no doubt that monetary contraction has played an important role in generating the current British recession. As I argue in detail in "The Case for Gradualism" a slowdown in real economic activity and an increase in unemployment are an integral part of the transmission mechanism for monetarist anti-inflation policies. However, it would be a mistake to blame all of Britain's current problems on a botched monetarist experiment. The current recession has been heavily concentrated on the manufacturing sector of the economy. The service sector has seen only a small contraction, while primary production, at least as far as oil is concerned, has hardly been affected. This evidence suggests that two other

factors have been at work in Britain. First, North Sea oil has had a major impact upon Britain's terms of international trade. Oil's significant and favourable impact upon Britain's balance of payments has made it much more difficult for manufacturing to compete on world markets, and there was bound to be a difficult and drawn out adjustment problem here. Also, successive British Governments have, for decades past, been reluctant to permit such industries as steel, ship-building and motor vehicle production to contract as fast as market forces would have dictated. There is thus a large element of "chickens coming home to roost" in the current contraction of the British manufacturing sector, and though the speed of the birds' return may have something to do with the generally non-interventionist stance of the Thatcher government it has nothing to do with monetarism.

10. If the above arguments are correct, they suggest that the United States has little to learn by way of example from recent British experience as far as the desirability of implementing monetarist policies is concerned. The British experience is largely the outcome of specific local problems which are not so strongly present in the United States, or from errors that there is no reason to suppose the United States need repeat. Nevertheless, that does not mean that the United States can expect to use monetarist policies, which I believe are the only ones available to deal with inflation, without encountering adverse side effects. Temporary, but not necessarily short lived, recession is bound to accompany such policies, and in the current

state of knowledge the advice to proceed gradually is the best a monetarist can offer to minimise its adverse effects. He might also counsel the implementation of policies to make labour markets more efficient, but such advice really has nothing in particular to do with monetarist anti-inflation policies. It should be given in any event. Finally the monetarist might note that, although base control methods for implementing monetary policy render monetary and fiscal policy largely independent of one another, their adoption does mean that, the higher is the budget deficit, the more upward pressure will government borrowing put upon interest rates.

ISSN 0228-4235
ISBN 0-7714-0263-5

CENTRE FOR THE STUDY OF INTERNATIONAL ECONOMIC RELATIONS

WORKING PAPER NO. 8104C

ON THE CASE FOR GRADUALISM

David Laidler

This paper contains preliminary findings from research work still in progress and should not be quoted without prior approval of the author.

DEPARTMENT OF ECONOMICS
THE UNIVERSITY OF WESTERN ONTARIO
LONDON, CANADA
N6A 5C2

ON THE CASE FOR GRADUALISM*

by

David Laidler

* This paper builds upon and incorporates material from my essay "An Alternative to Wage and Price Controls" which was published in M. Walker (Ed.), The Illusion of Wage and Price Control, Vancouver, The Fraser Institute, 1976. I am grateful to Dr. Walker and The Fraser Institute for granting me permission to use the material here, and to Franco Spinelli for helpful comments on this version of the paper.

I

INTRODUCTION

For more than a decade now, governments throughout the Western world have been struggling with the problem of combating inflation. With the passage of time, the view that inflation is essentially a monetary phenomenon, to be coped with by means of monetary policy has gained wider and wider acceptance, not least among those responsible for the conduct of policy. In the public perception of these things, there exists a body of doctrine, usually known as "Monetarism", which seems to say that, if only the money supply is brought under control, so will inflation. The proponents of this doctrine are often portrayed as suggesting that the cure for inflation is really rather a "simple" matter, or "simplistic" in the vocabulary of their critics. To put matters this way is misleading, and always has been.

The economic theory that underlies advocacy of a monetary cure for inflation is relatively straightforward. However, monetary policy affects variables other than the inflation rate, and, if monetary policy is nevertheless devoted to achieving price level targets, it cannot be used for other ends. Also, and quite obviously, there exists a whole host of policy problems that are not monetary in nature, but which nevertheless might reasonably require the attention of those same governments that attempt to cope with inflation. All of these matters make the actual conduct of a monetarist anti-inflation policy a politically complicated matter.

This essay seeks to clarify the issues involved in the use of monetary policy, conceived of as control of the rate of growth of the money supply, to bring inflation under control, in the hope that proponents and opponents alike of such policy will come to have a better appreciation of the complexities that must inevitably arise if it is to be implemented successfully.

II

PRICE STABILITY AND A MONETARY RULE

The first step in designing policy to produce a non-inflationary economy is to set a reasonable and attainable goal. It is clearly impossible to achieve a state of affairs in which the cost of living for each and every member of the community remains constant on a day by day or even a year by year basis. Even if some overall measure of the general price level were to be held absolutely constant over time, and as we shall see in a moment that is hardly an attainable goal, different members of the community would find their own personal cost of living varying, perhaps up and perhaps down, at any particular moment. For example, the relatively poor spend a larger proportion of their incomes on food than do the relatively rich. A bad harvest would cause the price of food to rise, and even if prices in general were stable, that would cause the cost of living to rise for the poor. On the other hand, the rich spend a greater proportion of their incomes on travel. A growing scarcity of energy makes travel costs rise relative to most other prices, and hence faces the rich with an increase in their cost of living.

There is no way of preventing things like bad harvests happening, or of completely suspending the depletion of energy resources, and it is therefore idle to pretend that everyone can be guaranteed a constant cost of living. The best that can possibly be done is to follow policies that will ensure that, overall, taking one year with another, the rate of change of some reasonably representative price index will vary about a constant rate close enough to zero that the community finds any remaining tendency for prices to drift up (or down) tolerable. This is a modest goal, to be sure, but it has the great virtue of being attainable, and once attained, it ought to be sustainable as well.

In any country, long run stability in the inflation rate at a low level once achieved, would be sustained if its Central Bank, or whatever other agency might be in control of such matters, maintained a policy of making the supply of money grow at an appropriately chosen rate, year in and year out. The basis for this proposition is, in broad outline at least, the same now as it was when Milton Friedman set it out in (1960) Such a policy would work in any country where there existed a reasonable degree of price flexibility and a stable aggregate demand for money function. That seems to include just about every country that has ever been studied and certainly advanced economies such as the United Kingdom, the United States, and Canada. Let us consider the demand for money first of all. The firms, households, and other institutions that make up any economy use money - currency and bank deposits - to carry on their everyday business, and each one of them, on average, might be expected to keep by him an amount of cash that is related to the volume

of market transactions he is involved in and to the average price level at which those transactions take place. Moreover, the typical agent might be expected to keep on hand a certain amount of cash to meet unforeseen contingencies, while some may also hold money to facilitate speculative activities in bond, stock, and commodity markets.

The reader will here recognise Keynes's familiar triad of motives for holding money, and there is nothing inconsistent about invoking his analysis as a basis for the monetarist policy propositions which this essay is devoted to arguing. The key point is that, although there is no logical reason why it has to be so, these motives, and perhaps others as well, in fact prompt people to act vis a vis their money holding in a way that is predictable. Moreover, though any individual's desired money holding might and does fluctuate over time, such fluctuations tend to cancel out as we aggregate over individual agents, so that, for the economy as a whole there does in fact exist a stable relationship between the level of real national income and the general price level on the one hand, and the amount of money that the economy requires to carry on its business on the other. Though there is nothing intrinsic in Keynes's theory of the demand for money, or in any other theory either, that requires that we should observe a stable aggregate demand for money function, there is nothing there to rule it out either, and the existence of such a relationship for a wide variety of times and places is, as I have already noted, one of the best established facts of applied economies.

Even so, I have referred to this relationship as <u>stable</u> and not <u>constant</u>. The relationship between money holding on the one hand, and

real income and prices on the other, is not one that can readily be observed on a day by day, or even on a quarter by quarter basis. It does begin to become apparent when we take our data year by year, though even here it is rather rough and ready. The relationship in question seems to involve the economy's demand for nominal money rising in proportion to the general price level (as basic economic theory would predict), and perhaps a little more slowly than real income. Even so, this relationship leaves ample room for year by year fluctuations in the economy's demand for money relative to real income and prices. Money typically bears interest at zero or at least low and rather inflexible rates, so when market interest rates are high, agents economise on money holding and devote more of their wealth to holding income earning assets instead. Also, empirical evidence seems to show that short term fluctuations in real income do not have so pronounced an effect on the quantity of money demanded as do longer term changes: that is, it is permanent, rather than current income that affects the demand for money. And none of this is to mention the fact that sudden shocks to the money supply, or to variables on the demand side, can lead to the economy being temporarily pushed "off" its demand for money function altogether. (On all this see Laidler (1976) (1980).)

However, all of the factors I have just discussed are inherently temporary in nature and so therefore is their influence on the demand for money, which on average, taking one year with another, does grow steadily with real income and prices. It follows from this that, if the monetary authorities provide only enough money to accommodate the growth in the

public's demand for cash that stems from real income growth (perhaps adjusted for any long term changes in interest rates if there are any) there can be no room for prices to rise. A money supply that grows at a rate a little below the trend rate of growth of real income, the precise figure here being one that could only be settled after detailed quantitative work had been carried out on a specific economy, will serve automatically to stabilise prices at a roughly constant level. To see why, let us now consider what would happen if the price level did not remain constant, bearing in mind what has already been said about the importance of a degree of price flexibility.

Suppose in some economy or other, for some reason, perhaps the autonomous activities of trade unions, or of a few large corporations, the price level began to rise; what would then happen? At first there would be very little in the way of an observable response. Agents would find themselves becoming short of cash as they tried to carry on the same volume of business at a higher and rising price level, but one would not expect them to take immediate action in response to this. A cash shortage is inconvenient, but not something that requires instantaneous attention. However, if that shortage persisted, as it would in the case envisaged here, we might expect to see agents begin to take action to build their cash holdings up to a more comfortable level. How they would do so would almost certainly vary from agent to agent. Some would temporarily cut back expenditures on currently produced goods and services in order to let their cash build up; some would try to dispose of other assets that they were holding, such as bonds or equities; while others would attempt to

extend their credit at banks and other financial institutions.

All this activity would, among its other effects, put upward pressure on interest rates, and therefore have two further effects. First, because the demand for money varies with interest rates, agents would become more willing to live with less cash relative to their volume of business, and this effect would tend to slow down the process of restoring the economy to a zero inflation rate. Indeed, in principle it could be strong enough to short circuit the whole stabilisation process I am describing here, but empirical evidence tells us that such forces are not strong enough to do this in practise. Thus, it is the second effect that is of crucial importance: higher interest rates would begin to impinge upon spending decisions, particularly perhaps the investment decisions of firms, and households' decisions to purchase durable goods such as housing, and automobiles. These effects would supplement the direct effects on the demand for output of the activities of those seeking to restore their cash positions by immediately reducing their expenditure on goods and services. Overall, there would be created a downward pressure of demand that would work against whatever forces they were that were tending to push up prices in the first place. Since that downward pressure of demand would continue to grow so long as prices continued to rise, it must ultimately cancel them out.

Conversely, any tendency for prices, or real income for that matter, to fall would, if the supply of money were held on a constant growth path, be met by excess liquidity on the part of agents, a tendency for interest

rates to fall and for the demand for goods to expand, thus putting upward pressure on prices and output. In short, if the money supply grows at a constant rate, real balance effects (where the term is broadly conceived) for that is what we have been describing here, will act as a powerful built in stabiliser for the economy, tending to maintain price stability without any direct action on the part of the authorities. Such a policy will not guarantee complete price level stability as I have already remarked, but on average, taking one year with another, the inflation rate ought not to deviate too far from zero if such a policy is maintained.

The question must immediately arise as to whether we cannot do better than that. When prices begin to rise, why should not the authorities act to slow down the rate of growth of the money supply in order to speed up the economy's return to price stability? In principle there can be no doubt that this is possible, but problems arise in practise. If the authorities are to intervene in a helpful way, they must have a great deal of knowledge about what is happening in the economy, about what is going to happen, and about how the economy will react to their actions. They must ensure that their countervailing policy does not end up putting on too much pressure in the opposite direction or in putting on such pressure at the wrong time, because if it does either of these things, an active policy, however well intentioned, would make prices less stable over time than they would be were a simple rule adhered to. There is considerable doubt about whether we have enough knowledge of the structure of the economies we live in, or of the factors underlying the autonomous shocks to which they are subject to be able actively to use the money

supply as a stabilising device without thereby running a severe risk of doing more harm than good.

Moreover, when we say "structure of the economy" here, we are not referring to something like the structure of a machine, but to a set of relationships that describe the actions of economic agents, of human beings. It is extremely unlikely, as such advocates of the "rational expectations" notion as Lucas (1976) and Sargent and Wallace (1975) have warned us, that such a structure will remain stable in the face of different types of policy actions on the part of the authorities, so that the problems to which I have referred will not easily be solved by the growth of quantitative knowledge. Human beings, in order better to plan their own lives, take account of what it is that policy makers are doing and are always therefore likely to surprise the policy makers with their reactions. The difficulties here are not, that is to say, merely the product of the current imperfect state of knowledge, but are inherent in the nature of human society and will always be with us.

All in all then, it is a matter of elementary prudence to suggest that policy makers should settle for a simple rule to govern their behaviour, and then stick with it. To implement such a rule will not ensure anything like perfection, but it is likely to lead to the perpetuation of a reasonable degree of price stability, if that is once achieved. However, to opt for a rule is not to opt for rendering monetary policy makers redundant ever afterwards.

89-772 O - 82 - 4

I have already noted above that the choice of a particular growth rate for the money supply would have to be based upon quantitative considerations. Assuming that one knew what the economy's underlying growth rate was, one would need to know the real income elasticity of demand for money in order to choose a non-inflationary rate of monetary expansion. Furthermore, it might also reasonably be added that one would have to know what he meant by the word "money". Currency plus deposits at banks is not a precise enough definition for practical application in a world in which the lines between deposits at banks, and their other liabilities, not to mention those between banks and other financial intermediaries, are, to say the least, unclear. In fact these two issues are closely interrelated, because empirical evidence tells us that, on the whole, the more broadly is money defined, the greater is its real income elasticity of demand. In a world in which the structure of financial institutions never changed it might be sufficient to argue that it doesn't much matter which concept of money is to be controlled, so long as the relevant growth rate is consistently selected. After all, a world without institutional change, if one monetary aggregate has its growth tied down on a non-inflationary path, then all the other aggregates might be expected to fall into line in due course.

The problem with all this is that institutional change does take place, and is notoriously difficult to predict before the event. In the financial system, one of its effects is to change the relationship between the theoretical concept of "money" and any particular collection of assets which, at any particular time, might be selected to stand for "money" for

the purposes of conducting policy. For example, a change that permits deposit accounts - time deposits in North American usage - to become subject to transfer by cheque clearly changes the meaning of any monetary aggregate that excludes such accounts, and indeed of one that includes them for that matter. Such a change would thus cause the demand for a particularly defined aggregate to shift, and perhaps its income elasticity of demand to change as well.

Though one should not overstress the importance of such changes, they have nevertheless occurred in the past in many countries, and their effects on the demand for money function have been observed to be significant (see Bordo and Jonung 1978). Moreover, monetary institutions, and the people who operate them, are not immune to the general tendency of economic agents to react to the observed conduct of policy in ways that might surprise the policy maker. Thus, when it is said that it is important to tie down the growth rate of the money supply if a zero (or low and stable) inflation rate is to be sustained in any economy, this does not mean that the policy can be implemented simply by choosing a particular aggregate at a particular moment, calculating its income elasticity of demand from past data, and then legislating that in the future, it grow for ever more at a particular rate. The monetary system must be constantly monitored for institutional change to ensure that the chosen monetary aggregate and the growth rate targets set for it remain compatible with attaining the goal of price stability, and the relevant targets must, if necessary, be adapted to changed circumstances.

If all this seems suspiciously like a form of fine tuning to the reader, that is because this is exactly what it is. To adopt a monetary rule is not to abandon "fine tuning", but to ensure that the money supply, rather than the levels of real income, employment and prices, becomes the proximate object of fine tuning. The case for adopting a monetary growth rule is that, by fine tuning the money supply, one is more likely to achieve stability in the ultimate target variables of monetary policy than if one attempts to fine tune them directly. It should not be confused with arguments to the effect that economic policy should in general be subjected to quasi-constitutional restrictions, for it exists quite independently of the ideological considerations that underpin these latter proposals. (The reader who is interested in these ideological matters will find Yeager (1962) well worth consulting.)

III

GOVERNMENT BORROWING AND THE EXCHANGE RATE

Monetary policy is not carried on in a vacuum. It is but one of the macro-policy tools available to government, and cannot be implemented independently of the others. If a government undertakes a particular policy towards the growth rate of the money supply, then that will put constraints upon the conduct of fiscal policy, and upon policy towards the exchange rate as well, constraints which we will now discuss.

Let us begin with fiscal policy. Any government, national or local, federal or provincial, must balance its books. It must cover its current expenditures either from taxes or borrowing, or in the case of local and

provincial governments in most countries, from grants from senior governments as well. In the present context, it is the central government that is of prime importance, because, in most countries, it is the central government, and the central government alone, that has the power automatically to borrow from the Central Bank if it deems it desirable. Indeed, in many countries, the Central Bank is to all intents and purposes a branch of the central government, and therefore completely subservient to its political decisions. Though that is how it should be in a democracy, one can understand the nostalgia of some economists for the days of truly independent Central Banks, for they did, (and in the case of Germany and Switzerland still do) resist what they perceived to be political pressures towards inflationary policies more effectively than do those institutions which, like the Bank of England, for example, are just another branch of government.

The problem arises here because, when a government borrows from its Central Bank, it is, to all intents and purposes printing money. As the Bank lends to the government it adds a treasury liability to its own assets, and creates a brand new liability of its own, a deposit, which it hands over to the government. The government then spends this deposit, thus putting newly created money into circulation, and money of a special type at that, because in most banking systems, Central Bank liabilities may be, and are, held by the Commercial Banks as reserves. Thus any increase in their quantity enables the banking system as a whole to expand its liabilities, and hence the money supply, by a multiple of that original increase.

The implication of the last paragraph is quite straightforward. If a Central Bank is to be told to ensure that the money supply grows at a constant rate, year in and year out, then the volume of central government activity (and public sector activity where the central government is an important source of funds for the rest of the public sector) that can be financed by borrowing from the Bank must be consistent with the pursuit of that policy. It must not fluctuate too much from year to year, and in the long run can grow only at about the same proportional rate at which it is intended that the money supply grow.

Now, of course, the government of any country has many policy goals to pursue other than the control of inflation. National defence must be provided for, health and welfare programmes must be financed, relatively depressed regions of the country, or particular depressed industries, might be thought worthy of subsidies, and so on. One could argue at length about the merits of any particular government programme, or indeed, on a more fundamental level, one could engage in debate about the principles that should govern any form of government intervention in economic life. However, none of these matters is relevant as far as the current discussion is concerned. The implementation of a rule for money supply growth in order to ensure reasonable price stability is neutral as far as questions concerning the degree of government intervention in the economy is concerned. Its importance for fiscal policy arises because it puts constraints upon the way in which government expenditures are paid for, not because it constrains their overall level and structure.

The implementation of a monetary growth rule implies that the vast majority of government programmes must be tax financed, or paid for out of the proceeds of bond sales to the public. Taxes depress private spending, as do bond sales because they put upward pressure on interest rates, but that is exactly what is required if government expenditure is to be expanded without putting undue inflationary pressure on the economy. If government spending is to be expanded in an economy operating in the region of capacity output, then private spending has to be reduced to make way for it. It is usually politically easier for governments to increase their expenditure than to raise taxes or drive up interest rates by bond sales. Thus, they always face a strong temptation to finance their spending by borrowing from the Central Bank in what amounts to an attempt to hide from the population the true costs of their expenditure programmes. However, in such circumstances the private sector still has to release resources to the government. Inflation is simply the means by which this is accomplished when the government spending is financed by borrowing from the Central Bank.

A commitment to a rule for the rate of growth of some monetary aggregate forces the government to act in such a way that the costs of its expenditure plans are made readily apparent to the public which, in any event, must bear them. For a government to commit itself to a monetary growth rule involves it in being self disciplined about the way in which it finances its programs. To say this is to recognise yet another aspect of the role of such a rule in the maintenance of price stability. However, to repeat a point already made, there is no reason to suppose that the

implementation of a money supply growth rule puts any limits on the scope of government economic activity over any range that is politically relevant in contemporary Western economies. In this respect the rule is politically neutral and is not an adjunct of a generally non-interventionist policy stance, except in the sense that the non-interventionist politician is likely to find the financial constraints implied by the rule less onerous to meet than his interventionist counterpart.

So far the discussion has proceeded as if we were dealing with a closed economy, an economy that is not involved in trade with the rest of the world, or in the workings of world-wide financial markets. However, all Western economies are deeply involved with the world economy, and even the largest of them, the United States, is nowadays sufficiently "small" in relation to that world economy to be potentially vulnerable to external shocks. If one asks what constraints the implementation of a monetary rule would place upon a country's choice of policies towards the foreign sector, he will soon discover that it is left with no choice but to allow exchange rate flexibility if it is to be able to adhere to that rule in the presence of shocks coming from outside.

To see why, consider what would happen if a particular country was attempting to pursue a monetary rule calculated to generate domestic price stability at a time when there were strong inflationary pressures at work in the rest of the world. Suppose that under such circumstances that country tried to maintain a constant exchange rate between its currency and some representative "rest of world" currency, or basket of currencies. Then the prices of imported goods would begin to rise at home.

At the same time, exporters would find it getting progressively easier to sell their products in world markets, and would therefore be tempted to raise their prices abroad and at home as well. As a direct result of these effects there would develop simultaneously a balance of payments surplus and a tendency towards domestic inflation. A constant rate of monetary expansion, if it was maintained, would, of course, offset the tendency towards inflation, but the growth rate of the money supply could not in fact be maintained on target in the face of a fixed exchange rate and a balance of payments surplus.

A balance of payments surplus involves the inhabitants of the home economy receiving a net inflow of foreign currency. There is no reason to suppose that they will wish to accumulate and hold stocks of foreign exchange; instead they will present them to their Commercial Banks in exchange for domestic currency, and those banks in turn will present the foreign exchange to the Central Bank for redemption. The maintenance of a fixed exchange rate requires the Central Bank to be willing to buy foreign exchange presented to it in unlimited amounts and at fixed prices. Moreover, it must buy the foreign exchange with newly created liabilities of its own: that is to say with newly created money. Thus, under a fixed exchange rate, a balance of payments surplus leads automatically to a step up in the rate of money creation in much the same way as does a step up in the rate at which the government borrows from the Bank.

It is sometimes argued that these consequences can be avoided by so called "sterilisation" operations, whereby, after purchasing foreign exchange, the Central Bank then sells government bonds on the open market in order to reduce the money supply again, leaving the overall quantity of money in circulation unaffected by the balance of payments surplus. The problem here is that such bond sales put upward pressure on domestic interest rates, and such pressure leads to an inflow of capital. This in turn increases the balance of payments surplus and hence puts further upward pressure on the rate of monetary expansion. In the contemporary world, with its extremely efficient international capital markets, these effects would come through very quickly, in days or even hours, rather than weeks, so that sterilisation policies, which in the 1950s might at least have been capable of delaying the monetary consequences of balance of payments surpluses for a few months, are no longer likely to be effective even for a short period. The maintenance of a fixed exchange rate therefore makes it impossible for a country to maintain a constant growth rate for the money supply. The two are alternative rules for the conduct of policy, and are incompatible with one another. A flexible exchange rate is a necessary prerequisite for a money supply growth rule.

It should be noted explicitly that the arguments just advanced do not claim very much on behalf of a flexible exchange rate as far as its ability to insulate the economy from foreign disturbances is concerned, nor should they, for strong claims in this regard cannot be defended. To begin with, it is now widely understood that there is a whole class of foreign disturbances, which will influence the real terms of trade that

face any particular country, and will make their effects felt domestically regardless of the exchange rate regime. For example, if the world price of oil goes up relative to the prices of other goods, then that will make the inhabitants of an oil importing country worse off, and those of an oil exporting country better off, regardless of the exchange rate regime. Morecver, the effects of such a change on the profitability of oil using industries, or of industries which must compete domestically for inputs with oil production will also be the same under fixed or flexible rates. Moreover, if the rest of the world is subjected to monetary instability as a result of other countries' authorities not adopting monetary growth rate targets, then as Dornbusch (1976) has argued, that instability can, in the short run, be transmitted through the foreign exchange market even, and indeed particularly, to the economy of a flexible exchange rate country. The only advantage that is being claimed for a flexible exchange rate here is that, in permitting a country to adopt a money supply rule, it permits it to choose its own long run average inflation rate. In my view then, the case for a flexible exchange rate is identical to the case for adopting such a rule, rather than raising a separate and distinct set of issues.

IV

UNEMPLOYMENT AS A POLICY PROBLEM

The previous section of this essay was concerned with the effect of the adoption of a rule for the monetary expansion rate on policy towards the exchange rate, and on the means available for financing government expenditures. I have not yet said a word about policy towards unemployment,

and yet in the quarter century after the Second World War "full-employment" was widely regarded as a more important policy goal than price level stability. I must now, therefore, say something about what the implementation of a monetary rule might do to a government's ability to pursue a "full employment" policy. The first, and most obvious thing to be said here is that, if monetary policy is to be geared towards the control of inflation, then it cannot also be actively deployed to pursue an employment targets. However, the government of a modern economy has many tools other than monetary policy available to it. Therefore, to say that monetary policy cannot be used directly to influence the unemployment rate is not to say that a government should not have a policy towards that variable or that it is lacking in means to carry out such a policy. Nor, as we shall see in a moment, is it to say that the pursuit of price stability by way of a monetary rule will not, in and of itself, have effects which are likely, in the long run, to be beneficial on that variable.

As with the pursuit of "price level stability", so with that of "full employment", it is important to have a goal that is in fact attainable. A state of affairs in which every member of the labour force has a job at all times is obviously not attainable (or perhaps even desirable), so just what is a reasonable target to pursue on the employment front? A growing economy is inevitably in a state of flux. New products and processes are continually being introduced, and the structure of output best suited to meet the desires of the population is always changing. At any time, some sectors of the economy will be shrinking while others expand, and labour will have to move between them. One cannot expect such

movement to take place instantaneously. Even when to change employment does not require him to gain new skills, it still takes time for a worker displaced in one industry to find a job elsewhere, and when the market for a particular type of skill shrinks with the industry in which the workers who possess it are employed, the process of moving between jobs is likely to take even longer. Moreover, it is not just the movement of existing members of the labour force between jobs that generates such frictional unemployment. When the young enter the labour force for the first time, they too take time to find suitable employment, and again, this is likely to take time, time during which they are unemployed.

When we talk, therefore, of trying to achieve "full employment" in the economy, we must allow for the consequences of structural change and frictions in the economy in setting our goal. We must recognise that there is a "natural", or (more neutrally) a minimum feasible, unemployment rate. Setting aside for the moment the difficult question of how one might go about estimating that unemployment rate, its very existence raises an important caveat for "full employment" policies, namely that, no matter what arguments might be raised in their favour, the conventional tools of fiscal "demand management" are not suitable devices for driving down the natural unemployment rate should it be judged to be unacceptably high. At best, such policies are appropriate to dealing with unemployment that arises from an overall shortfall in the level of aggregate demand below the economy's productive potential. However, this does not mean that a modern government is powerless to affect the natural unemployment rate's level if it does find it too high.

The appropriate policies for dealing with such unemployment as arises from labour market frictions and structural change in the economy, involve reducing those frictions, and hence making it easier for workers made redundant by technical change to acquire new skills, making it easier for people to move from labour surplus areas to labour shortage areas, or for firms to move in the opposite direction. There is no space in this essay to set out and debate the merits of particular policies to deal with these problems. Which policy mix it is best to pursue in any time and place is likely to depend upon the particular characteristics of the problem as it manifests itself there.

Sometimes extensive job retraining schemes might be appropriate, and sometimes regional subsidies, but policies to reduce the natural unemployment rate need not always involve an increase in government intervention in the economy. In some cases, already existing policies contribute to keeping the unemployment rate up, and their removal would help matters. For example, in the United Kingdom, rent controls on private sector housing, and the heavy subsidies given to council tenants and owner occupiers, taken together greatly inhibit the geographical mobility of labour; so does the institution of redundancy payments. In the United States and Canada minimum wage laws have a damaging effect on the employment prospects of the young and the unskilled. In all of these cases a reduction, rather than an increase, in government intervention in the markets would help the unemployment rate.

Now quite obviously such policies for dealing with the natural unemployment rate as I have mentioned above will not find universal

support anywhere. The interventionalist politician will be attracted by job-retraining schemes and regional subsidies and repelled by the abolition of housing subsidies, redundancy benefits, and minimum wages. Anyone with an ideological attachment to market mechanisms will take just the opposite view. However, to argue for a monetary rule for the control of the price level does not imply that one should take one side or the other in such debates. If the growth rate of the money supply is to be kept on track, that does have implications for the way in which government expenditures are financed. However, as I have already stressed, it has no implications for the scale of such expenditures, or for the structure of government intervention in the economy. In particular there is nothing about a commitment to a monetary rule that inhibits the pursuit of high employment by other means if that is deemed desirable.

One can, albeit tentatively, go a step beyond this, and suggest that the climate of price level stability that a monetary rule would create might itself have beneficial effects on the unemployment rate. To the extent that inflation itself is a source of confusion, uncertainty and friction in economic life, and to the extent that the protection against such uncertainty that can be afforded by indexation schemes of one sort or another is incomplete, then the absence of inflation will in and of itself promote the smooth workings of markets, not least the labour market, and to that extent reduce the natural unemployment rate. How important such a side effect of price level stability might be is, in the current state of knowledge, a debatable point, but qualitatively at least, the effect is there, and ought not to be ignored.

The last few paragraphs have dealt with the "natural" unemployment rate, or what a "Keynesian" economist might call the "irreducable" minimum unemployment rate, by which he would mean "irreducable by demand management policies". Now I must say something about the effects of the adoption of a money supply growth rate rule on our ability to counter increases in the unemployment rate above this irreducable minimum. As I have already argued at considerable length elsewhere, there is every reason to suppose that unemploument which results from a failure of the labour market to clear is, from time to time at least, a fact of life, rather than a figment of the Keynesian economist's imagination. In this context again, the adoption of a money supply growth rate rule will have beneficial side effects, for reasons that have, in effect, already been discussed.

If, for some reason, the level of real income and employment were to begin to fall below their "natural" levels, this would also tend to be associated with a reduction in the inflation rate and hence in an economy in which a rule was being pursued, would automatically generate excess liquidity in the private sector. This, in turn, would stimulate spending and hence help to restore full employment. In short, a monetary rule acts as a built in stabiliser for output and employment as well as for the inflation rate, and this is not to mention the possibility that its adoption would actually remove a source of instability from the economy, namely those destabilising shocks that actually originate in fluctuations, either intentionally induced or otherwise, in the rate of growth of the money supply.

Even so, there is no reason to suppose that the stabilising effects

of a constantly growing money supply would, by themselves, be sufficient to ensure the maintenance of a comfortable level of employment at all times. They might be, but there can be no guarantee of this, and in any event, monetary weapons are not the only ones that might be deployed in an attempt at managing the level of aggregate demand. Fiscal policies involving variations in the scale of taxation and government expenditure are also available to be used to this end. Indeed, because they impinge directly upon the flows of income and expenditure in the economy, they are particularly well adapted to having a rapid impact upon the level of employment, an impact moreover that might be expected to die down over time as private expenditure is "crowded out" by government spending, so that any mistakes made either in the scale or timing of fiscal policy are unlikely to have long lived adverse macro effects. There is no reason to argue that the implementation of a rule for the rate of growth of the money supply should be accompanied by the abandonment of such policies. One can easily conceive of them having a role to play in ironing out those fluctuations in income and employment that would remain even when a monetary rule was providing a background of long term built in stability to the economy.

However, there are a number of provisos to the foregoing conclusion that merit explicit note. To begin with, and quite obviously, any government budget deficits that arise from the use of activist fiscal policy as a stabilisation device must be covered by borrowing from the public, and not by borrowing from the Central Bank, because only in this way can the conduct of fiscal policy be made consistent with the maintenance of a constant

89-772 O - 82 - 5

rate of monetary expansion. Second, fiscal policy's major roles in the economy are to influence the allocation of resources and distribution of income. To the extent that its use for stabilisation purposes interferes with the pursuit of other policy targets, there might be important policy trade-offs to be taken into account in deciding how freely to use it for those purposes. Third, I have suggested that fiscal policies act quickly, and so they do once they are in place. However, the political process may be such that the process of implementation is slow and uncertain. This seems to be more of a problem in the United States with its Congressional system of government than in two party Parliamentary systems, but it remains a problem worth considering nevertheless.

Finally, I began this section of the paper by noting that there existed a "natural" unemployment rate, and that it was only appropriate to use traditional demand management tools to increase employment if the economy was operating above this rate. We must, therefore, be able to measure the natural unemployment rate with some confidence if we are ever to be in a position to deploy fiscal weapons to influence employment and output in a useful fashion. The amount of disagreement that there has been in recent years about just what is the value of the natural unemployment rate in the United Kingdom, or in the United States or Canada for that matter, suggests that in the current state of knowledge, we are in no position to estimate that rate with any degree of confidence at all.

The issues that I have just raised should make one rather cautious about how much to expect from fiscal policy as an employment stabilisation device. However, only the first of them has anything to do with the

adoption of a monetary rule. The others are quite independent of this and would have to be addressed by any advocate of fiscal policy, no matter what his views on the proper mode of behaviour for the Central Bank. Thus, to adopt a monetary growth rate rule to control the price level does very little to constrain the use of fiscal policies to combat unemployment. The adoption of such a rule does not therefore require a downgrading of unemployment as a target for policy. It leaves policy-makers with ample scope to choose other means for achieving such goals should they wish to do so.

V

ANTI-INFLATION POLICY

The preceding sections of this paper have argued that the adoption of a constant rate of growth for the money supply, adjusted from time to time if institutional change in the financial sector seems to warrant it, will confer upon an economy, not perfect price stability or perpetual full employment, but at least a good prospect of achieving low and reasonably stable inflation and a level of employment that will fluctuate around its "natural" rate. It has also been argued that such a monetary policy need not inhibit the authorities from attempting to reduce that natural unemployment rate by way of policies towards the labour market if they wish to do so, nor from attempting to iron out remaining fluctuations in employment about that natural rate with fiscal policy; although in the latter case I have expressed skepticism about how much could in fact be accomplished by such means. On the other hand, it has been noted that the

adoption of such a package does place certain constraints upon some aspects of policy. In particular the implementation of a monetary rule implies acceptance that the great bulk of government expenditure be tax and bond financed, and that interest rates and the exchange rate be left to be determined by market forces at whatever level they might dictate.

The proposal to use the money supply to provide a background of price level stability stops far short of guaranteeing perfection in economic life then. At best it provides an environment in which the many other economic and social problems with which modern governments are expected to deal can be tackled. Which problems will be taken up, and the means used to cope with them, will undoubtedly vary from country to country, and from time to time as well, as power shifts among various political parties. The analysis underlying this essay tells us nothing about what ought to be done here, and certainly does not support the position often attributed to advocates of monetary policy by their opponents, though seldom with any justification, that the adoption of appropriate monetary policies will in and of itself do all that is needed to solve these other problems. Monetary stability merely creates an environment in which it is easier to tackle a whole array of social and economic problems. It does not constitute a solution to them.

The situation in which just about every economy in the Western world now finds itself is far from being one of monetary stability. Inflation, at rates that even fifteen years ago would have been regarded as unthinkable, is now endemic in the system, and it is not enough for the

economist to point out that price level stability would be preferable to inflation, and that, once achieved, it can be maintained by keeping the money supply on an appropriately chosen constant growth path. He must say something about how it can be achieved, about how to get there from here. The answer that I would give to the question implicit here can be expressed in the single adverb "gradually". It is commonly agreed that the current world wide inflation began in earnest in the mid-1960s, largely as a result of the key currency country of the Bretton Woods system, the United States, attempting to finance the Vietnam War by way of money creation. It took till the mid-1970s for the increase of the trend rate of inflation in most countries to come to an end, and since then, they have at best held the line against further increases in the long run inflation rate. We have, that is to say, taken fifteen years to get into our current situation, and I can see no reason why we should not expect to have to take close to a decade to get back to where we were in the mid-1960s as far as inflation is concerned.

It is my judgment that inflation must be tackled by way of a programme of slowly but surely reducing the rate of monetary expansion until a rate compatible with long run price stability is reached, indeed that this is the only policy that is likely to be found tolerable. By this I do not mean that the policy will be a pleasant one, but only that the alternatives would be worse. The key factor underlying this judgment lies in the role played by expectations in economic life, and in particular the role that they play in the inflationary process. It is commonplace, but an important one, that economic activity takes place over time.

89-772 O - 82 - 6

Decisions taken today are decisions taken for the future, and that future is an uncertain one. A firm deciding upon its production plans and its pricing policies must take a view about how much output it can sell, and at what prices, over the horizon for which it is planning. In negotiating a wage contract, both sides must base their bargaining positions, and the ultimate settlement, upon what they think are the prospects over the period of the contract for the particular industry they are involved in, and for the economy as a whole. Indeed the very planning period over which expectations must be formed is itself something which must be chosen, and not the least of the advantages of a climate of monetary stability is that it permits the horizon to be lengthened, and hence makes the planning problems of firms and households alike less onerous and time (not to mention resource) consuming to solve.

Wages and prices are set in terms of money, so that expectations about the time path of the purchasing power of money must become pervasive elements in economic decisions. Currently held expectations about the future inflation rate influence currently made decisions, not least those that are made about the future time path of particular wages and prices, so that there is a strong element of self-fulfilling prophesy about the behaviour of the price level. If all agents expect the price level to remain stable, each firm will set the money price of its own output on that expectation, and each wage bargain that is struck will also be based upon that expectation. The result of all these individual decisions will be that the general price will in fact tend to be stable. If, on the other hand, everyone expects the inflation rate to run at shall we say ten

percent per annum into the relevant future, then that expectation will be built into the behaviour of wages and prices, and the inflation rate will indeed tend towards ten percent.

Now when we use the word "expectation" here, we must be careful not to think of it as necessarily being a consciously constructed forecast of the time path of the inflation rate. For some economic agents, for example large firms or trade unions with specialised economic research departments, it will indeed be just that, but for many agents an "expectation" about inflation amounts to little more than an uneasy feeling that prices are rising faster than they did. Moreover, it is not the state of anyone's psychology, or the quality of their explicit forecast (if they make one) that matters for the inflationary process, but the way in which expectations get translated into action. The large corporation or trade union might use its latest inflation forecast as an input into a carefully calculated pricing or wage bargaining strategy, but for less sophisticated agents, the "feeling" that prices are rising faster than they used to might translate into what amounts to a change in their habitual behaviour vis-a-vis price and wage setting. This is a point of some importance in the context of the current inflation, because it has now been going on for fifteen years or so. That in turn means that there now exists a whole generation of adults who, never having experienced anything different, take rates of price and money wage increases in double digits quite for granted. No doubt, as inflation is brought down, they will learn not to do so, and will develop new expectations and habits, but there is no reason to believe that they will do so quickly.

The arguments presented in the last few paragraphs imply that, once inflation is well under way, as it surely is in just about every Western economy by now, that complex of factors that we label with the deceptively simple word "expectations" imparts a good deal of inertia to the behaviour of prices. Prices continue to rise in large measure because they have been rising. However, if the inflationary process is going to proceed smoothly, it needs to be validated by the behaviour of the money supply. If a ten percent per annum inflation rate is actually going to continue unchecked, the money supply must grow at a rate fast enough to accommodate whatever growth in the demand for money might emanate from real income growth and such, and then at a further ten-percent to keep pace with rising prices. The policy strategy called "gradualism" amounts to doing no more than slowly reducing the rate of monetary expansion over time until it will accommodate no inflation, and the reason for bringing about this reduction in the rate of monetary expansion slowly lies in the consequences for real income and employment of reducing the rate of monetary expansion.

The main short run - but not necessarily short-lived - effects of reducing the monetary expansion rate in an economy where inflation is well entrenched is not a reduction in inflation at all, but a downturn in real activity and an increase in unemployment. When the monetary expansion rate is reduced, economic agents begin to run into the very type of cash shortage we discussed earlier, and their reaction to it will result in a fall-off in the level of aggregate demand for goods and services. However, when the individual firm experiences a decline in its sales, it has to decide whether the decline is a temporary abberation that can safely be ignored, or whether it portends a longer term shift in market conditions.

It takes time and resources to gather the kind of information needed to make such a decision, so that the initial reaction to falling sales across the economy is a build-up of unwanted inventories of goods and not much else.

It is only when it becomes apparent to firms that the fall in demand is not a localised or transitory phenomenon that they will take action. Such action will involve cutting prices (which includes raising them by less than otherwise would have been the case) to boost sales, or cutting output, or a combination of such policies. The general presumption must be that their initial response will be more heavily weighted to the side of cutting output. In part this is simply because cutting current output is complementary to increasing sales as a means of reducing unwanted inventories, and partly because it is sometimes cheaper for firms to adjust output than go to the expense of revamping their price-lists and informing their customers about this. More important however is the simple fact that wage contracts already entered into put a limit on the extent to which prices can be lowered without involving firms in losses. It is easier to cut output, put workers on short time, or indeed lay them off altogether, than to renegotiate an existing wage contract in a downward direction, not least because lay-offs only affect a part of the labour force, while wage cuts have to be negotiated with everyone.

Inflation expectations, the long-term contracts that embody those expectations, and the difficulty that firms, and indeed other agents too, must inevitably experience in distinguishing random fluctuations in demand

from longer term changes in its time path, all interact to cause a reduction in the monetary expansion rate to have its first major impact on output and employment. However, inflationary expectations are only one ingredient of wage and price setting behaviour. The appearance of excess capacity in the economy will lead firms to revise down their prices relative to their initial plans, and the associated unemployment will lead to a similar effect on the time path of wages as contracts come up for renegotiation. In time therefore the inflation rate will indeed begin to slow down. As it does so, expectations will begin to be revised downwards, habits will change, and the fall off in inflation will tend to become cumulative.

In due course, the falling inflation rate will catch up with the rate of monetary expansion, but it does not follow from this that the process we are describing would be then at an end. The inflation rate might not simply "catch up" with the monetary expansion rate, but is likely instead to overtake it. If it did, agents would begin to find themselves with surplus cash, demand would begin to increase, and the process we have just described would reverse itself. Although monetary contraction would eventually lead to a permanently lower inflation rate, the approach to this long run solution would be in a series of cyclical swings around the long term trend, rather than along a smoothly converging path. There would be similar swings in income and employment about their natural rates, and, in the current state of our quantitative knowledge, there is no reason to suppose that these swings might not be of several years duration each. (A more formal analysis of these cyclical swings

is given in Laidler and Parkin (1975)).

The probability that, under a gradualist policy, the inflation rate is likely to follow a cyclical path is important for a number of reasons. First, it implies that there is no reason to expect any close correlation between the rate of monetary expansion and the price level during the, perhaps long drawn out, approach to a lower long run average inflation rate, and that therefore the absence of any such correlation should not be read as evidence of the failure of such policy. Second, and closely related, the fact that, at some time after the implementation of policy, a satisfactory inflation rate has been achieved, does not mean that this inflation rate will be sustained. A temporary trough in the inflation rate is not the same thing as a lower long run value for the variable, nor is an upswing in the inflation rate a sign that a gradualist policy is failing. However, these considerations undoubtedly make the problem of sustaining the political consensus necessary to maintain such a policy in place a difficult one, and must naturally lead to the question of whether or not one cannot do better than "gradualism".

Could one not, for example, so manipulate the money supply as to keep the inflation rate coming down smoothly, so that the success of the policy in question was obvious to the average observer? The answer here is straightforward, for the question implicitly asserts that a fine tuning policy towards the inflation rate would be preferable to a simple contraction of the rate of monetary growth. So it would, if such a policy could be designed, but it is vulnerable to all the objections already raised in

this essay to fine tuning, I would argue that, if those objections are taken seriously, as they should be, we are forced to conclude that though desirable in principle, the policy here envisaged is unlikely to be feasible in practise.

As a matter of fact, a policy of fine tuning inflation out of the system is not often proposed, but it is frequently argued that gradualism is so likely to be slow and uncertain in its progress that a quick cure for inflation, involving a rapid - within a quarter or two say - reduction in the monetary expansion rate, is preferable. Such a proposal is often defended by pointing out that because so much of the inertia of the inflationary process comes from expectations, and because the expectations in question are held by rational agents who are well capable of observing the stance of monetary policy, an announced and clearcut change in policy might affect those expectations instantaneously. If it did, then it is argued that this would have a marked effect on inflation directly, without the intervention of real income and employment fluctuations.

There is nothing the matter with the logic of the above argument, but it does take the truth of certain empirical propositions for granted. First, it is one thing to change people's expectations with an announcement, and another to change their behaviour. Anyone tied into a long term contract before the policy change is announced will have to live by it, or attempt to renegotiate it, and a change in his expectations will not have any immediate effect on his behaviour. Also, before it can change

expectations, an announcement about a policy change must be believed, and there are two problems which suggest we cannot take it for granted that it will be. First, governments do change their minds, and because a policy is announced does not mean that it will be persevered with: consider for example the almost continuous speculation in the United Kingdom during the first two years of Mrs. Thatcher's government about the possibility of a "U turn". Furthermore, even if an agent believes that the government will stick to its policies, that will only affect his expectations if he believes that the policy will in fact work. Though Monetarists believe that a slowdown in the rate of monetary expansion will reduce inflation, they must recognise that that belief is controversial. Indeed, it is a minority belief in some countries. If they do recognise this fact, they will also recognise the inconsistency of arguing that the main transmission mechanism for such a policy can be through changes in the expectations of people who do not believe in it, and the absurdity of concluding on such a basis that the policy will work relatively quickly and painlessly.

Not all advocates of a quick cure for inflation rest their case on rational expectations. Lipsey (1980) for example agrees that a quick monetary contraction is likely to be more painful than a slow one while its effects last, but that the painful side effects will be over relatively quickly. This, however, is not obviously true. It may be that the cycles which a quick contraction might generate will be of a shorter duration than those brought on by a slow contraction, but that does not necessarily follow. In many dynamic economic models, the factors determining the period of any inherent cycle are not dependent on the size of the shocks to which the model is subjected, and it would be a bold economist who

speculated whether or not this was true of the dynamic processes underlying the interaction of monetary expansion, unemployment, and inflation, in the real world. The fact is that we know next to nothing about these things. And this is not to mention that a "short sharp shock" to unemployment might have unpleasant political consequences of its own.

VI

SUPPLEMENTS TO MONETARY POLICY

I have argued above that the case for gradualism is not that it is painless, or politically easier to implement than other policies, but that, in the present state of knowledge, its unpleasant effects are easier to foresee, and therefore assess, than those of alternatives. A quick cure for inflation might be less costly than a gradual one, but if it were, that would be the result of expectation effects, and of certain dynamic properties of market processes, on which, ex ante, we have no right to rely, for we have no evidence of their empirical relevance. Thus, a quick cure is also a risky one, and it is on what amounts to a declaration of ignorance that the case for the gradualist alternative rests. But the fact remains that the gradualist cure for inflation is likely to be painful, to involve unemployment and lost output over a number of years. Though economists nowadays would advocate wage and prive controls as an alternative to monetary contraction in the fight against inflation, there is still a substantial number of economists (e.g., Lipsey 1980, Tobin 1980, Bodkin 1981, Wirick 1981) who would advocate controls as a supplementary device likely to ease the real effects of monetary contraction.

Needless to say the advocates of controls are in favour of "effective" arrangements for reducing the rate of change of money wages and prices, but to stop at this point in making the case for controls is to stop too soon. Of course "effective" controls would reduce inflation: that much is tautological, and the only opposition to "effective" controls would be ideological. The place where there is room for serious economic debate is on the matter of whether or not any particular control scheme is likely to work in the first place, and this is undoubtedly an area where reasonable people can disagree. The advocates of controls seem to rest at least some of their case on the likely effects of the introduction of such measures on expectations about inflation. The arguments for and against this possibility are, in essence, the same as those that I have already discussed in the context of the likely effects of the announcement of a tight monetary policy on expectations. If the announcement was believed, if a significant number of agents expected the announced policy to be effective, and if they were in a position to act upon that expectation, then the introduction of wage price controls might indeed lower the actual inflation rate by this mechanism. It is one of the curiosities of recent debates about how to control inflation that those who seem to put the most faith in the benevolent effects of the announcement of monetary contraction on the inflation rate put the least faith in the announcements effects of controls, and vice versa.

Lipsey (1980) who advocates both quick monetary contraction and controls as interlinked parts of an anti-inflation package is one of the very few who have at least displayed consistency in their attitude

towards announcement effects and perhaps my own views on this issue will already be apparent to the reader. They are the very opposite of Lipsey's, and start from an attitude of acute skepticism about announcement effects as a reliable basis for the design of economic policy. I have no more faith in the power of an announcement of controls to influence expectations in a significant way, and more important to influence behavior, than I do in the power of an announced monetary contraction. However, at the same time, I cannot deny the possibility of such effects proving important in practice, although in the case of wage and price controls I do have a deeper objection than mere skepticism. If announcement effects are to be of any more than passing importance, the change in expectations that they engender must, with the passage of time, be confirmed by experience. In the case of controls, this is unlikely to happen because no set of controls can be comprehensive; in particular, in an open economy, prices originating in the foreign sector cannot be controlled, or at least not without the erection of an apparatus for direct quantitative controls on overseas transactions that most advocates of price controls would shy away from.

Under a fixed exchange rate regime, it is well established that the long run trend of domestic prices is determined in the world economy, and it is for just that reason that the advocate of monetary gradualism must also be an advocate of exchange rate flexibility. The issue to be faced here thus concerns the way in which wage and price controls would work against the background of a flexible exchange rate. Suppose for the sake of argument that controls were effective, either by way of influencing expectations or by some other means, in reducing the rate of

wage inflation and the rate of change of the "domestic component" of some relevant price index, below the values that they would otherwise take, given the stance of monetary policy. This would mean that there would be, at a given exchange rate and given world prices for those goods entering into the "foreign" component of the price index, more real cash balances for the population to hold than would otherwise be the case. The advocate of controls hopes that the presence of such excess money balances in the economy would serve to keep up the level of real aggregate demand, and hence lead to a higher than otherwise level of real income and employment. The sceptic, such as myself, notes that their effect might well be felt mainly in the foreign exchange market, driving up the value of foreign currency, hence ensuring that the foreign component of the price index would be higher than otherwise.

If this latter effect was predominant, then, overall the price inflation rate would be pretty much what it would have been in the absence of controls, although the structure of relative prices would be different. In particular, real wages would be lowered, and any expectations about price inflation engendered by the introduction of controls would be disappointed. Something very much like this seems to have happened during the 1973-74 experiment with wage and price controls in the United Kingdom (see Laidler 1976 for a fuller discussion), while Canada had a similar experience with controls, albeit in a much less dramatic and socially divisive way in 1975-77. (On the Canadian evidence see Fortin and Newton 1981.) In both cases controls seem to have amounted to policies to control real wages rather than inflation.

There is always the possibility that, next time around, it would be domestic output that would absorb excess cash balances. One cannot argue that an "effective" wage and price control programme is out of the question. Currently fashionable proposals for one form or another of tax-based incomes policies do nothing to meet this issue though, for the innovative element in such proposals concerns the way in which controls will be made to affect wages and domestic prices in the first place. I am suggesting here that the main case against controls does not lie in the difficulty of enforcing them in those areas where it is conceivable that they might work, but in the impossibility of controlling the behaviour of the overall price index in an open economy with a flexible exchange rate. Only if output and employment react more rapidly to variations in the quantity of money balances in the economy than does the foreign exchange market would there seem to be any hope of avoiding this problem. It is because I find such a possibility inconceivable that I remain sceptical about the desirability of using wage and price controls to bolster monetary contraction in the control of inflation.

Now it should be clear that the main burden of my objection to using wage and price controls is not an ideological one, but rests instead on a judgment that they would not in fact achieve the end for which they might be used, namely reducing the unemployment that one would expect to accompany a gradualist approach to the control of inflation. However, there are other measures that might be used to ease the difficulties of the transition to a lower inflation rate. To begin with, if unemployment on a larger than usual scale is going to be the consequence of monetary

contraction, then there is must to be said in favour of policies designed to ease the lot of the unemployed. If the authorities are going to undertake a policy that will have its adverse effects concentrated on a relatively small proportion of the population, and that is what undertaking a policy, one of whose predictable consequences is unemployment, amounts to, then it would seem only just to ensure that those who bear the brunt of the policy suffer as little as possible.

There is a strong case to be made along these lines, but there is a problem with it too that must be faced. The frictional and structural factors that underly the economy's natural unemployment rate arise, in part at least, from workers taking time to acquire new skills and to find new jobs when they become unemployed. The higher is their living standard while not working, the more careful would one expect them to be about selecting a new job, and hence the longer they will take about it. This is not to say that the unemployed are shiftless, nor is it to argue for making unemployment an unpleasant situation. However, it is to say that the higher the level of unemployment benefits, the higher is likely to be the level of unemployment. This is not just a matter of *a priori* speculation. We do in fact have a fair amount of empirical evidence about the effects of unemployment benefit variations on the unemployment rate. (See, for example, Grubel and Walker 1978.) However, this evidence is not cited here in order to make a case that unemployment benefits ought, after all, be fixed at low levels when an anti-inflation programme is being designed. It would be foolhardy, in the current state of knowledge, to

speculate as to whether we currently have too much or too little frictional unemployment. However, the effect of generous unemployment benefits on the natural unemployment rate is nevertheless a factor that the policy maker must take account of in deciding upon their appropriate level and structure. The reader should note, though, that policies designed to increase labour mobility which I have discussed earlier, are available to offset these effects. The authorities do not have to await the arrival of price stability to implement such policies.

Of course, one way of keeping the unemployment rate down during the transition to a lower inflation rate is to proceed slowly. That is what gradualism is about in the first place. However, inflation, as we know, also does social damage. This suggests that a useful accompaniment to a gradualist monetary policy might be measures designed to make it easier to live with inflation while the policy is working out. It is sometimes argued that such policies ought not to be introduced lest this in some way reduce the political will to come to grips with inflation. That would be all well and good if all it would take to defeat inflation was political will, with no unpleasant side effects, and if there was a feasible way of solving the problem quickly if only sufficient willpower was exerted. However, neither of these conditions hold, and it seems to me, therefore, that to eschew the use of policies for cutting down the adverse effects of inflation when they are available is quite pointless.

Some of the unpleasant effects of gradualism would be mitigated by

the spread of indexation. Where one of the contracting parties to an agreement is the government, as in matters of taxation and pension obligations, there is much to be said for enacting indexation as a matter of law. When it comes to private contracts, this perhaps is not necessary. The very operation of capital markets ensures that expectations about inflation come to be reflected in nominal interest rates, and so there is no need for any active policy in this regard. As to wage contracts, that surely must be left to the parties involved to decide. To the extent that the inclusion of cost of living adjustment clauses in wage bargains makes money wage inflation less rigid in the face of subsequent reductions in price inflation, it is to be encouraged, since this effect would tend to increase the speed at which inflation would be brought down by a given gradualist policy, and decrease the amount of unemployment that might accompany it. This consideration suggests that the authorities might encourage the use of such clauses, but hardly amounts to a case for making them in any way mandatory.

Moreover, it is important not to confuse indexation with a policy of guaranteeing that real wages never fall, and in practise there is a real danger of this happening, as the experience of the United Kingdom in 1975 or Australia over the 1975 - 1980 period shows. Wage indexation is a device for ensuring that, once a wage bargain is struck, its real consequences will be what the parties to it intended, not a device to prevent the parties to a bargain agreeing to a cut in real wages should the conditions prevailing in whatever industry they are involved in seem to require such a change. What form of indexation is appropriate in any

particular instance is not something that the outside observer can pronounce upon, and that is why the role of policy here should usually be the passive one of not preventing indexation, rather than the active one of attempting to enforce it.

VII

THE PROBLEM OF MONETARY CONTROL

The process of reducing the rate of monetary expansion slowly over time in order to bring inflation under control is every bit as much a proposal to fine tune the money supply as is the proposal to keep money on a non-inflationary growth path once the inflation rate is at a satisfactory level. Thus, the advocate of gradualism must say something about the means whereby such fine tuning is to be implemented. Broadly speaking, two methods of monetary control are available. The first involves the Central Bank in manipulating interest rates, and the second the reserve base of the banking system.

The rationale for interest rate control can be put as follows. As a practical matter, it is possible to estimate a "demand for money" function for the economy, using, shall we say, quarterly or even monthly data. Over such a short time period, the values of such arguments of that function as real income and the price level are in effect predetermined. The same may be said of the lagged values of any variables that might appear in the relationship. Some representative interest rate is also an argument in the demand for money function. Thus, in order to hit a given target for the money supply within a quarter, the Central Bank needs only

to calculate, given the values of the predetermined variables, the value of the interest rate which is compatible with its money supply target being demanded, set the rate at that level, and then leave it to the economy to move along its demand for money function. The econometric relationship underlying such an exercise are of course subject to error, but within reasonable limits, or so it is claimed, the rate of monetary expansion can be controlled by these means.

There are a number of problems with the procedures I have just outlined. First of all, as I have argued elsewhere, the relationship upon which such a method of monetary control is based is not really a structural demand for money function at all, but a peculiar and ill understood mixture of a long run demand for money function and the reduced form of whatever model describes the portfolio behaviour of the private sector and banking system. (See Laidler 1980.) Because it is so ill understood, such a relationship might prove less reliable in practise as a basis for gradualist policy than the results of empirical studies, carried out on data generated when the Central Bank was not implementing such a policy, might lead one to believe.

An absolutely crucial component of the case for using interest rate control methods is the existence of a well determined, and relatively elastic demand relationship between the behaviour of the monetary aggregate chosen for control and the rate of interest. However, it is an elementary result for macroeconomics that, the more interest elastic is the demand for money, the less built in stability does one get from

adopting a monetary rule. The choice of interest rate control methods naturally then leads to the choice as the centrepiece of policy, of a narrow money aggregate whose velocity varies relatively much with interest rates. Furthermore the choice of such a narrow aggregate maximises the chances of institutional change in the Banking System undermining the effects of monetary policy. When a broad aggregate is to be controlled, there is a good chance that such change will alter the composition of the "money supply" leaving the significance of the aggregate unchanged. In the case of a narrow aggregate, such change is more likely to result in the evolution of monetary assets outside the scope of the chosen aggregate that will, therefore, change its economic meaning. (On these issues see Courchene 1976, Howitt and Laidler 1979, and Laidler 1981.)

A Central Bank that was determined to pursue a monetary target single-mindedly, and was in a position to resist any political pressure that might be brought upon it to do otherwise, might nevertheless be able to get away with interest rate control methods. For example, after a shaky start, the Bank of Canada while using these methods has managed to keep within its money supply growth targets for over three years now. However, it is vulnerable to the criticism that the aggregate it has sought to manipulate has been sufficiently narrow as to be only a midly efficient stabiliser of the inflation rate. Even so, the Bank of Canada has, from time to time, found itself under acute political pressure as a result the behaviour of interest rates and the exchange rate.

Other Cantral Banks which have attempted to use interest control

methods have shown themselves less willing or, perhaps because of political pressures, less able to see those variables fluctuate enough to keep the money supply on track. (See Sumner 1980.) In practise they have not delivered a slow but steady contraction of the rate of growth of whatever monetary aggregate they have set targets for. The behaviour of the Federal Reserve System, at least until late 1979, illustrates this proposition well enough, as does that of the Bank of England. The latter institution's problems have been compounded by the fact that it has tried to control the growth rate of a broad monetary aggregate, many of whose components bear interest at competitive market rates, by manipulating interest rates on assets that are highly substitutible for "money". It is pointless here to speculate on how it managed to get itself involved in attempting this impossible task.

A key political problem with interest rate control is that when it is used the interest rate itself tends to take on the attributes of a policy target in its own right. That has happened in the United States and particularly in Britain. When this happens, and if the rate of money creation nevertheless retains some importance for the authorities along side the interest rate, they are left with little option but to try to control the rate of money creation by way of manipulating public sector borrowing. Given the value of the interest rate, there is a certain amount of public debt that the private sector will absorb over any time period. The difference between this amount and the overall borrowing requirement of the public sector determines how much the authorities must then borrow from the Central Bank, and therefore determines the size of public sector borrowing's contribution to monetary expansion. Hence if public sector

borrowing can be controlled, then so can the money supply. This line of reasoning explains why, in Britain in particular, the government has come to lay heavy emphasis on the control the public sector borrowing requirement as a key component of monetary policy. A reluctance on the authorities' part to tolerate interest rates fluctuations has led to the government budget contraint imposing a much stronger linkage between fiscal and monetary policy than is strictly necessary. The fact that public sector borrowing is hard to predict, let alone control, when much government expenditure and revenue fluctuates according to statutory obligations that cannot quickly be changed, explains why, when such a linkage is imposed, it is inevitably the conduct of monetary policy that suffers.

For all the above reasons, then, interest rate control, whatever may be its merits in principle, is unlikely to be an effective means of carrying out a "gradualist" monetary policy in practise. That is why the case for gradualism is so closely related to advocacy of "base control" methods for the implementation of monetary policy. The phrase "base control" is in some measure ambiguous. Some people use it to refer to a policy regime under which rules are set for the rate of growth of the monetary base instead of some broader monetary aggregate, and others use it to refer to a regime under which the monetary authorities manipulate the base, over which they can if they wish have direct control, in order to bring about a particular growth rate for some broader aggregate. Here I am using the phrase in the second sense.

There is nothing mysterious about the techniques of base control. They exploit the fact that there can exist a stable "multiplier" relationship between the monetary base - the cash liabilities of the Central Bank - and a more broadly defined money supply concept. How stable such a multiplier will be does of course depend upon some factors beyond the monetary authorities' direct control, for example the preferences of the non-bank public vis-a-vis holding money in currency as opposed to Commercial Bank deposits, as well as the banking system's demand for excess (that is greater than required, or conventionally held) reserves. Also, the tightness of the Central Bank's degree of control over the base will depend upon the conventions it adopts to govern the granting of rediscount facilities to Commercial Banks that find themselves short of cash. However, it is within the discretion of the Central Bank to alter these conventions and it should be obvious that the less automatic is the Commercial Banks' access to the discount window, the easier is it for the Central Bank to control the size of the monetary base.

Other factors that might influence the multiplier relationship are also susceptible to the control of the monetary authorities. Differential reserve requirements between different types of deposits, such as exist in Canada and the United States, or between different types of Banks, such as exist in the United States, or a basic cash ratio that is so small that variations in the Commercial Banks' desired excess reserves come to dominate the multiplier, as is the case in Britain, can all lead to undue slippage between the monetary base and the money supply. However, these factors can be dealt with by way of administrative changes. There

is no reason why there cannot be a uniform reserve requirement against all types of deposits that make up the monetary aggregate that the authorities wish to control. If the Central Bank were to pay interest to Commercial Banks on their reserve holdings, the main grounds on which the latter might object to such reserve requirements, namely that reserve requirements are a form of differential taxation on banks, would be removed.

Of course, I am not suggesting that changes such as I am advocating here would be politically easy to implement in all times and places. Nor, if a Central Bank switched to a system of base control over a monetary aggregate after a history of stabilising interest rates, would agents in private markets find the transition a straightforward matter. When a Central Bank ceases to step in to iron out day by day interest rate fluctuations, it takes private agents a while to learn to operate in the changed environment. Interest rates are volatile until private sector institutions learn how to take profitable advantage of such volatility and thereby compete it out of the system. The history of the United States in the wake of the Federal Reserves System's attempt to move to base control in the autumn of 1979 bears witness to the potential seriousness of such problems.

Now all this is to say that, if the authorities of a particular country opt for a gradualist policy, they should not take it for granted that they can implement such a policy without overhauling their monetary institutions to a greater or lesser extent. Under the Bretton Woods

system, and before that under the gold standard, interest rates were the key variables in the conduct of domestic monetary policy. It was by manipulating interest rates that Central Banks induced the kind of international capital market responses that enabled them to maintain their exchange rates fixed. Furthermore, under a Keynesian policy regime, monetary policy is subordinated to fiscal policy, and the main job of the Central Bank is seen as ensuring that the interest rate effects of financing fiscal deficits do not offset whatever influence fiscal policy is intended to have. Here again it is the interest rate rather than some monetary aggregate that is the important policy variable. The fact is that the monetarist proposal to put control of a monetary aggregate at the centre of policy is a radically new one as far as the behaviour of Central Banks is concerned. It should not therefore surprise anyone that the adoption of such a policy requires that monetary institutions be overhauled. The policy failures that have been experienced in so many countries over the last few years, not least in Britain and the United States where monetary targets have been more honoured in the breach than in the attainment, bear eloquent witness to the troubles that can be encountered if attempts are made to implement a monetarist policy in a Keynesian policy environment. Hence the overhaul is well worth carrying out.

VIII

CONCLUDING COMMENT

This essay has been a long one, but its basic theme is easily summed up: the use of monetary policy to establish and maintain control over the inflation rate is a complex matter, not because the economics that underlies such a policy regime is particularly difficult to grasp, but because of the way in which such a use of monetary policy impinges upon governments' ability to attain other policy goals, and to use other policy tools. A government that sets targets for the rate of growth of the money supply cannot also set targets for the exchange rate and interest rates, and it cannot also use monetary policy to manipulate the unemployment rate. Moreover, though it is still left with a good deal of freedom as far as fiscal policy is concerned, once money growth rate targets are set, its decisions about the financing of government expenditure are in large measure pre-empted. Also, in order to create a situation in which monetary growth targets are attainable in practise, institutional reforms in the financial sector of the economy may have to be undertaken. And none of this is to mention what is perhaps the most important of all problems with using monetary policy to cope with inflation, namely the fact that it undoubtedly creates unemployment as part of the transmission mechanism whereby it has its effects.

The above list of problems is formidable, and perhaps goes a long way towards explaining why the use of monetary policy to combat inflation has in practise been erratic and half-hearted in so many countries in recent years. Nevertheless, I find it inconceivable that inflation is

going to be brought under control anywhere without monetary policy being deployed. Thus, the purpose of this essay has been, not to advance arguments against its use, but to state in a clearcut fashion just what difficulties are likely to be encountered when it is used, in the hope that the old adage "forewarned is forearmed" might be of some relevance to the design of successful anti-inflation policies.

REFERENCES

Bodkin, R. (1981) "The Challenge of Inflation and Unemployment in Canada during the 1980s: Would a Tax Based Incomes Policy Help". Canadian Public Policy (forthcoming).

Bordo, M. and Jonung, L. (1978) "The Long Run Behaviour of Income Velocity of Causation: A Cross Country Composition of Five Advanced Countries 1870-1975". Paper Presented at European Econometric Society Meetings (mimeo).

Courchene, T. J. (1977) "The Strategy of Gradualism". Montreal, C. D. Howe Research Institute.

Dornbusch, R. (1976) "Expectational and Exchange Rate Dynamics". Journal of Political Economy, 84, 1161-1176.

Fortin, P. and Newton, K. (1980) "Labour Market Tightness and Wage Inflation in Canada". University of Laval (mimeo).

Friedman, M. (1960) A Program for Monetary Stability. New York, Fordham University Press.

Grubel, H. and Walker, M. (eds.) (1978) Unemployment Insurance. Vancouver, B.C., The Fraser Institute.

Howitt, P. W., and Laidler, D. (1979) "Recent Canadian Monetary Policy, A Critique" in Purvis, D. and Wirick R. Proceedings of Queen's University Conference on Economic Policy, Queen's University (mimeo).

Laidler, D. (1976) The Demand for Money-Theories and Evidence (2nd ed.) T. Y. Crowell, New York.

_____ (1976) "Inflation in Britain, a Monetarist Perspective". American Economic Review, (66), September, 485-500.

Laidler, D. (1980) "The Demand for Money in the United States Yet Again" in Brunner, K., and Meltzer, A. H. (Eds.), The State of Macroeconomics Carnegie-Rochester Conference Series, Vol. XII, Amsterdam, North Holland.

_____ (1981) "Monetarism - An Interpretation and an Assessment". Economic Journal (81) March.

_____ and Parkin, J. M. (1975) "Inflation - A Survey". Economic Journal, 75, December, 741-809.

Lipsey, R. G. (1979) "World Inflation". Economic Record, December, 283-296.

Lucas, R. E. Jrn. (1976) "Econometric Policy Evaluation" in Brunner, K., and Meltzer, A. (Eds.), The Phillips Curve and the Labour Market Carnegie-Rochester Conference Series, Vol. I, Amsterdam, North Holland.

Sargent, T., and Wallace, N. (1975) "Rational Expectations, the Optimal Monetary Instrument and the Optimal Money Supply Rule". Journal of Political Economy, 83, April, 241-254.

Sumner, M. (1980) "The Operation of Monetary Targets" in Brunner, K., and Meltzer, A. (Eds.), Monetary Institutions and the Policy Process, Carnegie-Rochester Conference Series, Vol. 13, Amsterdam, North Holland.

Tobin, J. (1980) "Stabilization Policy Ten Years After". Brookings Papers on Economic Activity (1), 19-71.

Wirick, R. (1981) "The Battle Against Inflation - Gradualism and Its Critics". Canadian Public Policy, forthcoming.

Yeager, L. (Ed.) (1962) In Search of Monetary Constitution, Cambridge, Mass., Harvard University Press.

CENTRE FOR THE STUDY OF INTERNATIONAL ECONOMIC RELATIONS

University of Western Ontario

Working Papers

8001. Robson, Arthur J. OPEC VERSUS THE WEST: A ROBUST DUOPOLY SITUATION

8002. McMillan, John and Ewen McCann. WELFARE EFFECTS IN CUSTOMS UNIONS

8003. Leith, J. Clark. MONEY, THE BALANCE OF PAYMENTS, AND GOVERNMENT DEBT IN A SMALL OPEN LDC: HAITI

8004. Mansur, Ashan and John Whalley. A DECOMPOSITION ALGORITHM FOR GENERAL EQUILIBRIUM COMPUTATION WITH APPLICATION TO INTERNATIONAL TRADE MODELS

8005. Schmid, Michael. OIL, EMPLOYMENT AND THE PRICE LEVEL: A MONETARY APPROACH TO THE MACROECONOMICS OF IMPORTED INTERMEDIATE GOODS UNDER FIXED AND FLEXIBLE RATES

8006. Markusen, James R. THE DISTRIBUTION OF GAINS FROM BILATERAL TARIFF REDUCTION

8007. Markusen, James R. TRADE AND THE GAINS FROM TRADE WITH IMPERFECT COMPETITION

8008. Markusen, James R. and James R. Melvin. TRADE, FACTOR PRICES, AND THE GAINS FROM TRADE WITH INCREASING RETURNS TO SCALE

8009. Whalley, John. AN EVALUATION OF THE RECENT TOKYO ROUND TRADE AGREEMENT THROUGH A GENERAL EQUILIBRIUM MODEL OF TRADE INVOLVING MAJOR TRADING AREAS.

8010. Laidler, David. MONETARISM: AN INTERPRETATION AND AN ASSESSMENT.

8011. Wonnacott. Paul and Ronald J. Wonnacott. FREE TRADE BETWEEN THE UNITED STATES AND CANADA: FIFTEEN YEARS LATER

8012. Hamilton, Bob and John Whalley. OPTIMAL TARIFF CALCULATIONS IN ALTERNATIVE TRADE MODELS AND SOME POSSIBLE IMPLICATIONS FOR CURRENT WORLD TRADING ARRANGEMENTS.

8013. Wonnacott, Paul and Ronald J. Wonnacott. THE TARIFF-FOREIGN OWNERSHIP-TECHNOLOGY NEXUS: TOWARDS A LESS TRUNCATED THEORY OF CANADIAN INDUSTRIAL TRUNCATION

8014. Laidler, David. INFLATION AND UNEMPLOYMENT IN AN OPEN ECONOMY - A MONETARIST VIEW

8015. Leith, J. Clark. AN ESSAY ON COMMERCIAL POLICY IN THE POST-IMPORT SUBSTITUTION ERA.

8016. Schmid, Michael. DEVALUATION: KEYNESIAN TRADE MODELS AND THE MONETARY APPROACH -THE ROLE OF NOMINAL AND REAL WAGE RIGIDITY-

8017. Whalley, John. INTERNATIONAL TRADE NEUTRALITY PROPOSITIONS FOR MOVEMENTS BETWEEN 'ORIGIN/SPLIT-RATE' AND 'DESTINATION/CREDIT' TAX BASES.

8018 Whalley, John and Bernard Yeung. EXTERNAL SECTOR 'CLOSING' RULES IN APPLIED GENERAL EQUILIBRIUM MODELS.

8019. Boyer, Russell S. and Geoffrey H. Kingston. Currency Substitution: A Perfect Foresight Optimizing Analysis.

8020. Markusen, James R. MULTINATIONALS AND THE GAINS FROM TRADE: A THEORETICAL ANALYSIS BASED ON ECONOMIES OF MULTI-PLANT OPERATION.

8021. Conlon, R.M. TRANSPORT COST AND TARIFF PROTECTION OF AUSTRALIAN AND CANADIAN MANUFACTURING: A COMPARATIVE STUDY.

8022. Markusen, James R. THE WELFARE AND ALLOCATIVE EFFECTS OF EXPORT TAXES VERSUS MARKETING BOARDS.

1981

8101C. Markusen, James R. Factor Movements and Commodity Trade as Compliments: A Survey of Some Cases.

8102C. Conlon, R.M. Comparison of Australian and Canadian Manufacturing Industries: Some Empirical Evidence.

8103C. Conlon, R.M. The Incidence of Transport Cost and Tariff Protection: Some Australian Evidence.

8104C Laidler, David. On the Case for Gradualism.

Senator PROXMIRE. Thank you, Mr. Laidler, and Professor Meltzer, for a very interesting analysis, particularly an analysis of the British economy and of its problems.

Mr. Meltzer, you came down suprisingly hard, in my view, on the debt management policies of the Secretary of the Treasury. A very interesting observation you made is that the Secretary of the Treasury seemed to be betting against the success of the Reagan program by selling bonds that bet against the policies, as you put it, and you called for better government debt management policy.

My question is, how?

Mr. MELTZER. Well, I think what the administration has to do—and I would hope the Congress would encourage them to do—is to stop selling 15 or 16 percent bonds. Most of our fellow citizens do not make 15 percent or, adjusted for the current rate of inflation, 9 percent. They do not make that kind of return. We're paying high interest notes to people who are betting against the success of the policy and when the Treasury week after week or month after month sells those bonds it is encouraging the belief that the policy will fail.

Senator PROXMIRE. Now just let me interrupt to say if you don't sell 16 percent bonds but sell bonds at 10 percent, in these days, then you sell them at a terrific discount, don't you?

Mr. MELTZER. Indeed, you do, but that isn't the only option, fortunately. I would have the Treasury issue an index-linked bond and put out an announcement that says we will pay zero interest on this bond and let it sell at a discount. Every 6 months we will pay to small savers as well as to big investment trusts the rate of inflation or some measure of the rate of inflation for that period. What I would do is say, "We challenge you. If you believe our policy is going to fail, we challenge you to buy these bonds which is our bet against failure." That's very important because if the policy doesn't work, then we have——

Senator PROXMIRE. If they believe in the policy, they won't buy the bonds.

Mr. MELTZER. But some will, and the rates will come down. What we want to do is get those bonds out there and then advance refund, as the Kennedy administration did some of the 20 and 30 year bonds at very high coupons. That will save the taxpayers the interest payments they are committed to pay for the next 20 to 30 years.

Senator PROXMIRE. This is fascinating. Give me an example of how this would work. They would sell the bonds on an index?

Mr. MELTZER. They would just say here is a zero coupon bond. Bid the real rate of interest.

Senator PROXMIRE. What would be the maturity of them?

Mr. MELTZER. As many years as they wish—20 or 30 years— a long-term, real indexed bond. Then the market will say, "We think that the real rate of interest has to be 3 percent over the next 25 years so we will bid 50 for those bonds. The Treasury will then pay nothing except the rate of inflation because the bond is indexed by the inflation rate and the inflation payment will be tax free. That's what we mean by indexing. The holder will get whatever he gets when he buys the bond, say at 50, and he holds it to maturity.

Senator PROXMIRE. Is there any country in the world that has that kind of system?

Mr. MELTZER. Yes. Countries have sold indexed bonds not precisely of the discount variety, but they have done that.

Senator PROXMIRE. Where?

Mr. MELTZER. Brazil, Finland, and Britain. The British have experimented with it to some extent but on a very limited basis.

Senator PROXMIRE. There are enormous inflation rates.

Mr. MELTZER. The current issue of the Economist in fact urges the British to expand their index-linked bonds and sell them as a means of funding their debt. Brazil has a very high inflation rate. I've spent a lot of time in Brazil so I have some idea of the nature of their problem. It is not related to the problem of indexing. It's related to the problem, as it almost always is, of budget deficits, and money, and the unwillingness of the government to pay for its expenditures on a current basis.

Senator PROXMIRE. So if you had an inflation rate tied to the CPI of 10 percent, then the Federal Government would pay a 10 percent rate of interest?

Mr. MELTZER. Right.

Senator PROXMIRE. And there would be a discount factor, presumably, under present market circumstances, right?

Mr. MELTZER. Right. Now one advantage of that is if the administration is right and we do manage to get the inflation rate down, then we save a lot of interest costs for future years. If the administration is wrong and the market is right and we don't reduce inflation—if this administration turns out to be like all the others and ends up reinflating, then the market has an instrument that it can use. There will be a default-free index-linked bond. People in the housing industry and other industries and the various intermediaries can tie their bonds, their obligations, onto those Government securities and offer the consumers the opportunity to borrow or lend at rates which protect them against inflation. That would do a lot to solve some of the problems of the housing industry, if we continue this period of high inflation.

I think that's a much better way of going about the debt management problem. There are other things that could be done. For example, the administration could issue a bond with a "put," which is really just the reverse of a GNMA. There's been some consideration of that. A bond of that kind would say to the market, look, if the inflation rate goes up, you can put the bond to use and get your money back; we'll protect you against higher inflation. If inflation comes down, you get the gain. I don't think that they should give those gains away. I think that's second best to an index-linked bond, but either one of them is better than what they are now doing.

The simple fact is, Wall Street does not tell its corporate clients to sell long-term debt at these interest rates. It shouldn't be telling the U.S. Government to do it.

Senator PROXMIRE. Just two more questions about that. No. 1, should money be backed by gold?

Mr. MELTZER. I think the gold issue is the wrong way to go. Index-linked bonds is much better. The difference between the two is that in one case you have a known quantity, the consumer price index which is a measure of what people try to hedge against. Gold is a very imperfect indicator of what's going to happen to the CPI. We have something better than the CPI—the PCE deflator. We have no idea of what's going to happen to the gold price. If the oil price goes down

and the oil countries sell their gold, we would have very different gold prices. By tying to gold, we would introduce a riskier element than we need to.

I think gold is a distinctly poorer alternative than the alternative I'm recommending.

Senator PROXMIRE. As you know, a mammoth cost of financing the Government today is servicing the Government debt and the expectation is that next year it will go over $200 billion. As a percentage of GNP it's much bigger than it's ever been in our history, including the height of World War II. We have had a bigger debt relationship with GNP, but never a bigger service cost.

In your judgment, how would this suggestion of yours affect the cost of servicing the debt?

Mr. MELTZER. Two ways: By committing the administration and by going out and challenging the market based on the mechanism that Professor Laidler talked about, which is known as rational expectations. Indexing would have some positive effect on market expectations and therefore reduce some of the cost. Second, if in fact the administration achieves what I think it can achieve, a 7-percent-inflation rate by the end of next year, by the fourth quarter of 1982, it will save enormous amounts of money just on the interest cost of the debt.

Senator PROXMIRE. On the other hand, supposing we go the other way?

Mr. MELTZER. In that case, we have a lot of problems, of which the financing of the debt will be smallest. The interest costs will go up, but the consumers will have an instrument which will protect them so they will be able to save. Savings and loans and banks will be able to buy indexed bonds and use them as a base for issuing their own, similar securities. They can build on indexed reserves. They can leverage on an indexed portfolio, taking a little bit of risk and offering the consumer the same opportunities that the Government offers.

Senator PROXMIRE. You're a great salesman, Mr. Meltzer. You're indicating the benefit this would have for the people that buy the bonds. For the Federal Government, of course, if inflation takes off, then the burden would be even greater. It would feed on itself.

Mr. MELTZER. But we don't want to have a policy which, if it turns out that we inflate, takes that inflation out of the hides and pockets of the consumer and the holders of these bonds. That's been a problem up to now.

Senator PROXMIRE. You've got to take it out of the hide of somebody. In that case, you take it out of the hide of somebody who can't afford to buy these bonds.

Mr. MELTZER. I would index across the board, including savings bonds that are offered by the Treasury to small savers. I would like indexing to be available to everybody, including the small savers who are in the most need of protection from inflation because they have the least knowledge about what their opportunities are.

Senator PROXMIRE. Mr. Laidler, how do you feel about this?

Mr. LAIDLER. I largely agree with it, sir. The Bank of England gave the same confused signals as the Treasury here appears to be giving, at the beginning of the Thatcher administration, marketing long-term government debts at rates of interest which were not compatible with

the government's own forecast of inflation. That created a lot of confusion in markets in the United Kingdom at the time. I have never been able to understand why the British Government doesn't issue indexed debt of the type Professor Meltzer is describing. It seems to me, if I may say so, that the only real problem with the debt of this kind is servicing the interest charges on it, if the rate of inflation stays in double digits and goes to 20 or 30 percent. I suspect that, in fact debt service would be the least of any government's problems if the inflation rate really did get that high.

May I just say one more thing. I think implicit in both of our support for this kind of proposal is the belief that the rate of inflation is within the government's power to control, that the rate of inflation is not something that is somehow visited on the administration from the outside.

Senator PROXMIRE. Well, let's follow up on that, the notion that the rate of inflation is within the government's power to control. Would a change in the current policy mix to a less restrictive monetary policy and a more restrictive fiscal policy, in your judgment, lead to lower interest rates and benefit the oil industry and other industries and encourage capital formation?

Mr. LAIDLER. Lower interest rates in the short run will benefit all those industries in the short run. I'm not so sure that such a switch in policy at the moment would not simply represent yet another twist in the inflation cycle. That is to say that the switch to——

Senator PROXMIRE. Let me just interrupt to say that when I suggest this change you could have a change without any change in our monetary policy. You could have this restrictive monetary policy as we have now but a more restrictive fiscal policy.

Mr. LAIDLER. I have to answer that if the budget was more in balance and government debt was putting less pressure on capital markets, interest rates would come down for a given rate of growth of the money supply; yes.

Senator PROXMIRE. Well, do you think that's of prime importance or do you think that would be secondary?

Mr. LAIDLER. I think that what is of prime importance is that monetary policy be seen to be mildly restrictive, be seen to be under control over the medium term. Then I would say that the size of the public sector borrowing requirement is of secondary importance.

May I say these problems are not only evident in the United States. We have the same problems in Canada. We have the same problem in the United Kingdom. I have been perhaps rather narrowminded in these policy debates. I have always concentrated on getting the monetary policy under control and have argued it's really up to the politicians to decide how big an interest burden they wish to put upon the private sector with their budgetary policy.

Senator PROXMIRE. You say that monetary policy is under control and we have a political problem. I'm a political official, as you know, and I have to vote on these policies in the Senate. It's very hard to defend—and I have been a defender, by and large, of a restrictive monetary policy, but it's hard to defend it against these very, very cruel and high interest rates. I go home as do other Senators and talk with the homebuilders and with auto dealers and so forth and they

are just singing the blues. They say, "We can't last more than a few months," and they point to firm A, B, C, and D that are out of business, good firms, but just destroyed by high interest rates.

Now even if the assistance of a more restrictive fiscal policy would be marginal, it would be of some help, and that's only the beginning of an incomes policy, a more vigorous antitrust policy, a more effective free trade policy, all of which would help us bring inflation under control. Wouldn't those make it more possible to have a monetary policy we could persist with? Because if we did these other things, wouldn't they tend to bring down the very damaging, cruel, destructive high interest rates?

Mr. LAIDLER. I would like to take that question in one or two parts. I would give first priority to keeping a mildly restrictive monetary policy in place. Then I would say that, if the political pressures that were being generated by the interest rates associated with that policy were troublesome, what government can also do is reduce its deficits to take the pressure off interest rates. That is essentially the only weapon that's available. I would be very skeptical indeed about going further down the line to any kind of wage and price controls scheme or anything else that might come under the heading of incomes policy.

Senator PROXMIRE. Mr. Meltzer, so far we have talked about fiscal and monetary policy. Some economists, including Mr. Blinder, argue that the improvement in the inflation situation is not so much because of a restrictive monetary policy as it is because of good luck in the energy area. I might add in the food area, too. We have had superb harvests in this country. We have had enormous increases in our production of food and food prices, as you know, have been almost stable for the last 7 or 8 months, coinciding with the easing of inflation. We have had a worldwide glut of oil and that's been very helpful.

What are your views on the role that really has been played by monetary and fiscal policy when you recognize these other elements have played a really big part in holding down the rate of inflation?

Mr. MELTZER. I believe that both have been at work. It's very difficult to separate out the two, but both have been involved.

First of all, our policy of decontrolling oil prices was a significant step in the direction that produced this glut. Second, I agree that the food prices that you mentioned have come down but that's not independent of the fact that the monetary growth has been slow. We have had periods and other countries have had periods in which food prices have come down and other prices have risen even faster so the weighted average of prices has gone up. The fact that the whole market basket of prices is coming down is due to the fact that people are responding to monetary policy.

Spot commodity prices are down somewhere between 30 and 40 percent since the end of last year. That has nothing to do with food. It has to do with prices of metals, prices of soybeans and all sorts of things that have little to do with a bountiful harvest in the United States. Commodity prices are down across the board. We see it in lumber prices, in housing prices, in gold prices, in silver prices, and in copper prices. All those prices show signs of disinflation.

What we need to do is to make those gains permanent. There's no doubt that the monetary policy, in my mind, is working. There's no

doubt also that as a result or our decontrol of oil prices and the world-wide recession of slow growth, there's been less demand for oil and that has contributed to slowing down measured inflation. I wouldn't want to estimate the precise amount. I would put the larger weight, however, on the economic policies and the smaller weight on these other factors.

Senator PROXMIRE. Mr. Laidler, both you and Mr. Meltzer persisted in this notion that the price that we pay to get inflation down is worth it, and you indicate that we have had a moderate amount of unemployment. I notice that just last month the unemployment rate went up to 7.5 percent. This may be just the beginning. Many people say it's going to get worse, and some people who favor our present policy say it's going to have to get worse. This means millions of people unemployed, probably 8 million people in this country, or close to it, out of work, because we have a very large work force, as you know.

Doesn't this suggest that we ought to be much more vigorous in pursuing other anti-inflation policies to offset the adverse effects of this emphasis on monetarism? There's just no question that high interest rates in the construction business and in the homebuilding business—we have housing starts now below a million a year, around 932,000 in August at an annual rate. We need at least 2 million starts a year. That's a fairly reasonable estimate of what we should be producing now given the demand we have. We are only operating at 7 or 8 million automobile units a year. We should be producing 10 million. That's a terrific price to pay. There are millions and millions of families in this country who are out of work in those two industries.

Then when you recognize that the farm implements—farmers can't afford to buy implements. Small business depends very, very heavily on credit. Isn't there some way we can ease the terrific pressure in some parts of our country and in some industries which is so painful for so many people?

Mr. LAIDLER. I think there may well be. The thrust of my views on this matter I think can be put very simply. Monetary policy, if it is geared to controlling the inflation rate, can't be used for anything else but controlling the inflation rate is not something that I regard as an end in itself. I regard it as a precondition for getting to grips with all kinds of other social and economic policy problems and I would want to look at micropolicies toward the structure of labor markets, toward the structure of particular industries, as a means of getting to grips with these kind of unemployment problems.

As you know, I come from London, Ontario, Canada, and we are very deeply affected there by what is happening to the automobile industry. My impression is that the workers in the automobile industry are extremely well paid relative to workers in other industries and that there might be scope for preserving jobs in that industry by getting them to take lower pay. Indeed there has been a certain amount of that going on in the case of Chrysler already.

I would worry about minimum wage legislation as another source of unemployment, particularly among young people. As far as the housing market is concerned, one of the reasons I think the U.S. housing market is in such a mess at the moment is that housing became the best or perhaps the only inflation hedge available to middle-income

groups and a heavily subsidized inflation hedge. The resulting inflationary bubble in the housing market is as much responsible for having squeezed the demand side of the market as are high interest rates. Ever since I wrote my Ph. D. thesis I have been an advocate of implementing a schedule A income tax.

Senator PROXMIRE. Let me just interrupt on that housing analysis. The average price of a house is $70,000 now. The payments on that are over $1,000 a month, meaning that the average family, and even the family with much better than average income, can't afford to buy it. Of that $1,000 a month, $800 or 80 percent is interest cost. That's the cost of a 17-percent 30-year mortgage—80 percent. So it's awfully hard to say that these other factors—the cost of the house or the cost of labor or the cost of land or any other element—is causing this. It's clearly a runup in the appalling rate of mortgage interest—17 percent. Back in 1950, the average mortgage rate was 4.5 percent in this country. For many, many years it was 6 percent.

Mr. LAIDLER. I think this problem in the housing market, which we share in Canada and which they have also encountered in the United Kingdom, does have deeper roots and I think its roots lie in the fact that the owner-occupied house has for the last 10 years been the best or the only hedge against inflation available to middle-income groups. It's certainly true in Canada and I would be surprised if it wasn't true in the United States. House prices have risen very much more rapidly than the price index in general and had it not been for inflation I doubt if we would have seen that relative price increase. Had it not been for inflation, indeed I doubt if we would see current interest rates either. I think we are seeing here one of the very nasty costs of inflation—I don't wish to minimize the seriousness of the problems facing the households who have been caught out, who have misjudged the final consequences of getting caught up in what amounts to a speculative bubble in the housing market, but I think these problems have been produced by inflation. Unfortunately, I don't see any other way out than to face the fact that this crunch in the housing market is one of the costs that is having to be paid for turning the inflation rate down.

Mr. MELTZER. May I just supplement that and try to bring the two of you closer together? It makes a big difference whether you think housing prices are going to go up or down next year. If you think they are going to go down, it's a terrible investment. If you think they are going to go up you may be willing to borrow at 13 or 14 or even 17 percent to buy a house. Expectations are very important in that market. I believe that it isn't a question of whether it's just the interest rate or just the housing prices. It's really the interest rates in relation to the housing prices and what you expect the housing prices to become.

I think there are things that can be done. I think better debt management policy would lower long-term interest rates. I believe if the Congress would make the Federal Reserve—bind the Federal Reserve to a tighter commitment on its monetary targets that would lower expectations of future inflation. That would help. I believe further budget cuts at this time would help. All those things will help the policy and will reduce the costs of this period we have to go through.

I share your view. We are moving in the right direction. What we want to do is try to reduce the cost of lowering inflation.

Some of the things which you recommend, however, would not do that. For example, an incomes policy. Private sector wages in Britain have not been the problem. Private sector wages have come down in this country and certainly in Britain much faster than anybody expected.

Senator PROXMIRE. You and Mr. Laidler seem to disagree on autos.

Mr. MELTZER. No. In autos, we see a high wage industry. We will not see a high rate of increase in the next round so we will see the rates of increase come down and I believe he thinks that's going to happen.

Senator PROXMIRE. That's true with the Teamsters too?

Mr. MELTZER. I think it's already happening. There are already reports around which say that the Teamster contracts are looking for a lower wage increase than they have had in the past. I think if we stick to the policy—1982 being a big year for wage bargaining, if we could come into 1982 with expectations of inflation coming down—and unfortunately it's going to be a relatively soft job market—we will see some more rapid adjustment in wage increases than we have expected or many people expected.

Senator PROXMIRE. Here comes Chairman Reuss and I'm going to have to leave to go to the floor of the Senate. I'm supposed to speak at 11 a.m.

Representative REUSS [presiding]. Thank you very much. I welcome you and apologize to Mr. Laidler and Mr. Meltzer for my tardiness, but I'm familiar with their testimony and want to thank them.

I have a number of questions. I'll start out with Professor Laidler. In your testimony you said that the world has not yet witnessed anything remotely resembling a clear-out experiment in applying a monetarism policy package. Would you agree with that assessment, Mr. Meltzer?

Mr. MELTZER. No.

Representative REUSS. Let's start out—I'll come back to Mr. Laidler, but let's hear you, if you will, on why you think that it has seen such experiments.

Mr. MELTZER. I think these experiments are run all the time. We have countries with high rates of monetary growth and we have countries with low rates of monetary growth and we have countries with high size of government and countries with low size of government. We have the interesting example of Japan which has, among developed nations, one of the lowest sizes of government relative to GNP and has a very high growth rate, high savings rate, with a lot of saving getting into capital investment. I remember one occasion when Japan's inflation rate was measured at 24 percent. Over a period of 2 years, Japan brought its inflation down to 4 percent. It took a recession or slowing of its growth rate and managed to get back to something reasonably close to full employment with much less inflation.

We have had lots of experiments of that kind in many, many countries. There's no doubt about our ability to make the experiments work. The only question is political. Not as a Congress or an administration but as a nation will we let those experiments run long enough to produce the gains which are very clearly there?

Representative REUSS. Now, Mr. Laidler, I should and will give you an opportunity to define your terms and see whether there really is a conflict or not.

Mr. LAIDLER. I don't think there's any disagreement at all between us. I do refer in my paper to the fact that there is a great deal of evidence about the components of monetarism economics.

All that I meant is that no country which has stated medium-term growth rate targets for some monetary aggregate in an inflationary situation has succeeded in bringing the inflation rate down and then stabilized the growth rate of the monetary aggregate in the long term. I think the nearest we have to an experiment in monetarist policies is the one in Canada where the Bank of Canada has succeeded in maintaining growth rate targets for a rather narrowly defined monetary aggregate for about 5 years now. I don't think the experiment has been a very clean one because the gradualism has been extremely gradual. Also, the growth rate targets have been set with wide rate limits and have given the Bank of Canada too many opportunities to manipulate interest rates and exchange rates and stay within the target. Furthermore, the monetary aggregate they have been dealing with has been rather too narrow for my tastes. Finally, their methods of control have been interest rate control methods rather than base control methods.

But subject to all those qualifications, the Bank of Canada has stuck to targets for about 5 years now and has at least stabilized the macro end of the Canadian economy. It hasn't had much success yet in getting the inflation rate down.

Representative REUSS. Over the weekend Secretary of the Treasury Regan in a widely printed interview deplored high interest rates and suggested that the Federal Reserve might ease up on the money supply creation. Would either of you care to comment on either the substantive pros and cons of that advice or on the political wisdom of adopting that form of communication with the Federal Reserve?

Mr. MELTZER. I think if I had told you, sitting here last December, that when we met in October that the inflation rate would be down by 3 percentage points and the unemployment rate would be very little higher than it was, you would have thought that that was wildly optimistic and unfortunately inaccurate. In fact that's what happened. One cannot say that this policy is disastrous since it's achieved more than one could have expected when we set out.

Part of the problem of not achieving even more is the lack of credibility about how long the policy will continue. In my opinion, every time Secretary Regan leans on the Federal Reserve or anybody else leans on the Federal Reserve to ease up, it sends a signal out to the world which says this government is no different than any of the others who have been here. They came with different rhetoric but not very different rhetoric after the first 6 months. As soon as they ran into problems they began to say "just inflate a little bit to get over this problem." That, of course, is why we have not gotten out of inflation in previous efforts.

What I believe Secretary Regan and others in the administration should be saying to the Federal Reserve is, "You've made more progress against inflation this year than you had any reason to expect.

You should lower the rate of growth of money in anticipation of the 1982 target. By the end of 1982 we can have substantial reduction in inflation if we persist in this policy."

The serious difficulties have yet to come. If the Secretary or others in the administration start to wave the white flag or even a pink flag in advance of those more serious difficulties—and I mean the rising unemployment which you referred to a moment ago—they reinforce the market's skepticism that once the unemployment rate rises, the inflation rate will not be far behind.

Representative REUSS. Thank you. Mr. Laidler, would you comment?

Mr. LAIDLER. Yes. I think that, with the benefit of hindsight, had I been able to set monetary growth targets for the United States and implement them and had I known that the targets that were set, and have now been implemented were going to push interest rates into the 20-percent range, I might have been willing to turn monetary policy around rather more gently, than it has been turned around. But that's with the benefit of hindsight.

Given that we are where we are and given that nobody really knows quite why interest rates have gone so high, I think that the risks of an easing off of monetary policy being misread as the first step toward lax monetary policy and another round of the inflationary spiral are so great that I wouldn't be inclined to take this advice to ease upon restrictions on money creation.

Representative REUSS. That suggests an interesting hypothesis. Suppose you believe what you've stated in your general attitudes about the relative tightness of the money supply, and suppose you were also a member of the Open Market Committee, which I believe is meeting today, 2 days after the quotation from Secretary of Treasury Regan. If you had as of last Saturday decided that when you came to Washington as a member of the Open Market Committee, you were going to opt for a slight, ever so slight, easing of money, still well within the targets but just a little gentle addition, would you not perhaps have thought twice or thrice today as a member of the Open Market Committee in achieving that slight easing for fear that you would seem to be capitulating to the Treasury, doing that very thing which the accord of 1951 supposedly stopped?

Mr. LAIDLER. I think I would have thought several times about the level of interest rates. I think I would have been less concerned about advice from the Treasury because advice to ease up on monetary policy is surely coming in from all quarters at the moment. I think I would have come to the conclusion that, given that we are where we are, the important thing is to give a clear signal that the policy is going to be maintained.

Representative REUSS. Mr. Meltzer, in your answer to the question just put, you spoke about the commendable current rate of inflation; 8 percent is awful, but it's so much less awful than 12 that I don't mind saying commendable. Part of that improvement in the inflation rate is due, is it not, to the relative glut of oil and the less steep increases on the part of OPEC?

Mr. MELTZER. Yes, part of it, but I would think a relatively small part. If those price decreases were in the form of the real price of oil which is far greater than the nominal price of oil, if those had occurred

with a very much larger rate of money growth, then the inflation would not have come down as much as it did and other prices would be rising faster. We see the reduction across the board in all the forward markets and all the spot markets. You see 30- and 40-percent rates of reduction since last December in copper, corn, wheat, and so on, without going into all the details. There's very good evidence that this is a very general phenomenon and it has to do with a worldwide—not just American—a worldwide shift to less inflationary policies. It is not just us but the Germans, Japanese, and others, and I think that's part of our problem of high interest rates.

I would like to say with the benefit of hindsight that what we urged the Federal Reserve to do this year and what they are doing now is very little more restrictive than what we urged them to do.

Representative REUSS. You of the Shadow Committee?

Mr. MELTZER. Right. They are very close to our targets and they are achieving more than we hoped for as a result.

Mr. LAIDLER. Could I just elaborate?

Representative REUSS. Sure.

Mr. LAIDLER. As far as oil prices, I have said one or two things in my notes about how skeptical I am of the rational expectations hypothesis and of announcement effects in general. However, I believe that when you have a cartel like OPEC, that is precisely the kind of organization which you can affect through announcement effects. Oil prices are fixed in U.S. dollars and I cannot conceive that the pricing policy of OPEC is independent of what OPEC thinks U.S. monetary policy is going to be. So I don't regard what's been happening to the U.S. dollar price of oil as being independent of U.S. monetary policy. I can't see how it could be.

Representative REUSS. Let me ask you both a question that may have been asked by Senator Proxmire but I'll take the risk. Given your views that firm control over the creation of new money is necessary, are interest rates now and in the recent past higher than you would like to see from the standpoint of achieving the goals of our economy, which I presume are maximum jobs, maximum production, and maximum price stability?

Mr. MELTZER. Absolutely. The object of this exercise is—it's more than an exercise—the object of this policy is to reduce inflation at the lowest social cost. I think there are things we should do and I want to mention one of them that I talked about before. I think the debt management policy is deplorable. The Secretary of the Treasury would be well advised to pay much more attention to his own policies than he does to the Federal Reserve's policies. He could do a great deal to help lower interest rates by improving debt management, including the use of index-linked bonds, or getting out of the long-term debt markets, much as private corporations do when rates are temporarily high. Corporations do not saddle their stockholders with 15- or 16-percent rates of interest. I don't understand why an administration that believes it's going to reduce the rate of inflation is saddling the taxpayers with 15- or 16-percent rates for 30 years. This sends out the wrong signals. They are betting against their policies. The Congress ought to be leaning hard on the Secretary of Treasury to improve debt management policy.

Representative REUSS. I find what you said very persuasive. It used to be said 10 years ago that the debt ought to be lengthened. That was the conventional wisdom and I think I may have subscribed to it.

Mr. MELTZER. It may have been the right thing to do then.

Representative REUSS. I was just going to ask you, was I wrong necessarily?

Mr. MELTZER. Certainly not necessarily, and there's no reason why it has to be shortened. I favor a long-term index-linked bond with a zero coupon selling at a discount. I favor a return to the Kennedy policy of advance refunding to reduce those long-term issues which are a burden on the taxpayers in the future, and particularly so if we get the inflation down. I favor challenging the market to convert those bonds into a bond which would have lower interest cost to the taxpayers and would provide a hedge against inflation for the bondholder.

Representative REUSS. I don't have firmly in my head the current composition of Treasury offers, but it is well dabbled with 20 years and long term, is it not?

Mr. MELTZER. Yes. Almost every month there's a 20-year bond issue or 30-year bond issue.

Mr. LAIDLER. I have very little to add to what Professor Meltzer has said. Perhaps an analogy with the United Kingdom situation last year with regard to the exchange rate may be of some relevance.

Last year it was clear that sterling was very badly overvalued and this was causing all kinds of extra problems to industries that were already in deep trouble in the United Kingdom. I think one of the best things that the Thatcher government did was resist the temptation to try to get the exchange rate down by going in for money creation. Last year, in Canada, we had high interest rates as I believe you did in the United States as well. The Bank of Canada undoubtedly did try to bring interest rates down to what they regarded as a more reasonable level by going in for money creation at the annual rate of about 30 or 40 percent for a 3- or 4-month period. I believe that the high interest rates we've got in Canada now are the result of that policy error.

Mr. MELTZER. They're higher than ours, by the way.

Mr. LAIDLER. Mortgage rates are 21 percent, nontax deductible in Canada now as a result of this. It seems to me that the right thing for an economist to say in these circumstances is that I don't really know why interest rates are as high as they are. Perhaps debt management policy could change things and could help to give clearer signals to the market. Whatever you do therefore, realize that you don't understand why interest rates are quite so high as they are and don't turn on the printing press in an effort to put the market on what you regard as the right track. You will be in an even worse situation this time next year if you start that.

Representative REUSS. I find that very persuasive. In other words, one who now tells the Federal Reserve let's not be too pejorative, let's not use the printing press; but tells the Fed to markedly ease money creation but is not willing to do anything about fiscal policy or credit policy or debt management policy, is really giving a prescription for further inflation because if you do nothing about these other things,

then easier money which in an across-the-board setting might be just what the doctor ordered, is simply going to accommodate and validate the inflationary demands that exist in the economy. Is that right?

Mr. MELTZER. That's right. Even the talk about going up—we're so far below the M_{1B} target—to go up to the M_{1B} target at this point requires M_{1B} growth this quarter at 9 percent. What's going to happen if we do that? We all know. The inflation rate will go back up. The unemployment rate is clearly not going to be any lower next quarter. Will the Fed bring money growth down again in the face of higher unemployment?

If we raise money growth, we're doing what General Patton said not to do, "Don't pay for the same ground twice." We paid to reduce inflation. We paid a cost to get where we are. We're going to pay some more costs. There's no point in paying and paying and never making the gains that we pay for.

Representative REUSS. I want to use the remaining time to pursue what I started. You both say that the Federal Reserve should not now suddenly and dramatically increase the money supply. To a simplistic mind, that sometimes sounds good. Money is high priced because it's so scarce, therefore let's make it less scarce and all will be well. I don't ask you to take the time to puncture that one because you pretty well have, but you both said the present high level of interest rates is economically and socially disastrous or undersirable.

Now what can we do consistent with a responsible Meltzer-Laidler monetary policy? What can we do to bring interest rates down? One, better debt management which you just mentioned. I would say of that, while I agree with you and while I think the case is very strong not to saddle the next generation with what we hope will be an untenably high long-term interest burden, and while the case is strong for not continually emitting wrong-headed signals, I can't see the adoption of a more sensible debt management policy as in and of itself contributing very much to bringing down interest rates right now.

Mr. MELTZER. It might reduce long-term rates as much as a few points, but let me say that's in the realm of conjecture. There are other things that we could do. I think, for example, the Congress could do some very useful things. Having indexed the tax system in 1984, it now has to face up to the fact that we no longer, whether we desire to do it or not, balance the budget or come close to balancing the budget with inflation. We would have to do it through taxes or we have to do it through inflation before 1984 or have to do it by cutting the growth of spending. That's what the great uncertainty is. Whether that uncertainty explains all that's happening to interest rates or only a part of what's happening to interest rates, it's clearly a big factor. No one can be certain whether this administration will decide to work its way out of the budget problem by inflating as previous administrations have tried to do or whether it will get more spending cuts or whether it will decide to raise taxes. That's the great uncertainty.

Now what we need to do—what the administration should do—is come in with the correct forecast. What the Congress could do is make a stronger commitment to monetary deceleration by passing a resolution which requires the Federal Reserve Chairman, as I have urged, to

keep his targets within 1 percentage point of his announcement. If he doesn't, he should offer his resignation either to the Congress or to the President. There would be greater credibility in monetary policy. Many chairmen—not just the present Chairman, but many, many chairmen come in with the strongest statements of commitment, but when we look back, for one reason or another, they didn't follow through.

It would help people to know we intend to solve the problem of inflation. There is no easy way to bring the interest rates down because the principal reason they are high—not the only reason but the principal reason—is the fear that this administration will throw in the sponge and reinflate. Going into the long-term debt markets is a very risky gamble. Short term rates are high. Those are very secure high yields. There's both a cost of giving up that safety plus a high risk that this administration, like others, will give in. The things we can do to strengthen the commitment by the Federal Reserve to its policies would be very helpful. The rest we can only do by changing debt management, by making some moves in that direction. But we have to wait for the drop in short term rates, then make it clear that the drop in short term rates will be followed by a consistent policy that will bring down long-term interest rates.

Representative REUSS. Now I must come back at you because I'm not getting nourishment out of your answer. The question I put is, given an austere rate of money creation by the Fed, which for purposes of this discussion we will all agree on, and given the fact that we all agree that high interest rates are an economic and social disaster, how can we get interest rates down?

You made one clear suggestion—better debt management, which on analysis has a lot of other things to be said for it, although rather small in the getting interest rates down component.

Let's get on to No. 2 in the platform which I think I heard you say; namely, fiscal policy. Aren't you saying that the deficit and the constantly augmented Treasury borrowing is an unnecessary increaser of interest rates, and that therefore effort ought to be made to contain and ultimately reduce the deficit? I think that's what you're saying.

Mr. MELTZER. I did say that. I would prefer to see that done by cuts in spending rather than by increases in taxes. The reason for that is that we must get a better social use of resources by transferring from consumption to investment. Government spending mainly goes to shift the other way, to discourage investment and increase consumption, mostly in transfer payments.

Representative REUSS. Well, putting that to one side, do you have a preference for spending as between military and nonmilitary?

Mr. MELTZER. Well, I'm not an expert on military, so I hesitate to make specific judgments. I believe that the guiding principle should be the efficient use of resources, both publicly and privately. I have a belief which I'm not at all hesitant to put on the record that the growth of military spending is beyond the range of efficient use of resources and therefore should be subject to greater cuts than is currently the policy of the administration.

Representative REUSS. Well, on this containing the deficit point which you have said is an important part of getting interest rates

down in a responsible manner, it would be in the public interest then if the President and the Congress got together and by some combination, whenever it can be arrived at, of military cuts, nonmilitary cuts, and revenue increases——

Mr. MELTZER. I would be opposed to the latter.

Representative REUSS. You're opposed to the latter, but as to the first two, then by some combination of them, you think it would be in the public interest to get together and make those cuts?

Mr. MELTZER. Very definitely.

Representative REUSS. Before we leave fiscal policy, let me tear a moment at your opposition to any and all forms of revenue raising. Are you against user fees? They aren't exactly taxes. They are revenue, however, and they are what yachtsmen pay for the intercoastal waterways.

Mr. MELTZER. No. I believe you should have efficient use of resources. We should not be subsidizing the use of yachts or yacht basins.

Representative REUSS. So you're for increasing user fees?

Mr. MELTZER. Where they are rational and can be shown to be related to costs; absolutely. The Government should not be subsidizing yachts.

Representative REUSS. What about as you look at the whole vast panoply of Federal taxation measures, are there not some which seem to be counterproductive in reducing capital investment? Does not the interest on consumer debt subtract from the credit available for capital investment? Does not the recently inaugurated all-savers certificate, by channeling credit toward housing, including luxury housing, and agriculture, assuming it does that, channel it away from business investment? And isn't there, as part of the exercise, a just hour or two to be spent examining those to see if you can't unleash the economy and make a buck or two in revenues in the process? You aren't against that?

Mr. MELTZER. I'm certainly not against efficiency, and many of those devices move in the direction of inefficiency. Efficiency in the social use of resources should be our goal. I certainly wouldn't characterize myself as someone who defends subsidies, whether they come in one form or another.

On the all-savers certificate. I don't believe that will have very much effect on housing. It's a subsidy for the savings-and-loan industry in a period of distress.

Representative REUSS. And the banks in a period of not much distress?

Mr. MELTZER. That's right. It should not have been extended to the banks. I would not have seen it go to the savings and loan industry, but there certainly was no justification for extending the subsidy to the banks.

Representative REUSS. So you will concede maybe we're spending a few billions there in tax expenditures that would look pretty nice balancing the budget and getting interest rates down.

Mr. MELTZER. I would think that any move which increases the efficient use of resources is not a concession. I'm in favor of that and I'm happy to say so. I am against changes in the tax cut designed to shift resources from consumption to investment and to increase saving.

Representative REUSS. That portion of it?

Mr. MELTZER. If we were to find other subsidies that are inefficient uses of resources or which encourage socially unproductive investments, absolutely, we should try to eliminate those if we can.

Representative REUSS. So on our little list here, getting interest rates down in a responsible manner, we have, not necessarily in order of importance: First, better debt management; second, better fiscal policy, which means that by some combination of revenue and expenditure measures we get control of the budget deficit and don't send the Treasury charging in to bid up the price of money.

Mr. MELTZER. That's right. I would take the reductions in both spending and increases in user fees. It's the Congress job, of course, to make the judgments about what the social use of resources should be. I think the Congress is of a mind to try to increase the efficiency of the use of resources and I think that's a commendable step and I think Congress has done very well this year.

Representative REUSS. A third field in which I don't imagine I'm going to get the support of either of you, but hope springs eternal—admittedly, the supply of money is and should be tight, under control. No quarrel with that. Admittedly, the demand for money is hiked up by excessive Treasury borrowing. We just discussed that and said let's have less Treasury borrowing.

Isn't there another item that we should at least look at? It does seem to me an inordinate amount of the finite credit resources of the Nation are currently dedicated to less productivity-enhancing uses than one would like to see. I'm thinking of the more than $1 billion the banking system currently has on Mr. Bunker Hunt and his silver speculation. I'm thinking of the scores of billions in set-aside funds by banks designed to facilitate corporate takeovers, none of which result in the coming into existence of a single new machine tool or productive piece of equipment, but simply result in the pricing up of existing assets—maybe undervalued ones, but still existing. I believe that the American banking system, being patriotic, if the President addressed and appealed to them, asking them—and here we are talking about the 100 biggest banks largely—to ease up on the more speculative loans for commodity speculation and for takeovers and at the margin in foreign lending on a voluntary basis, that the banking community would respond. Wouldn't that be another way of eliminating and cutting down on some of the hiked-up demand for money so there would be more available at a lower interest rate for productivity-enhancing investment?

Mr. MELTZER. Let me meet you part way. I would distinguish in that panoply those things which are market judgments. Where we are encouraging the use of credit through subsidies so that the borrower or the lender doesn't see the true cost, by all means, we should end the subsidy. That would be a step based on the same principle that I enunciated before, the efficient use of resources. Where somebody wants to speculate in the gold or silver market and use resources in that way, I see no social harm in allowing them to do that and no social need in trying to prevent them from doing it. But where we subsidize the activity, as in the case of foreign lending or in the case of loans to encourage various kinds of activities, both domestic and foreign, yes,

I think it would be useful to discourage that kind of credit investment because it's the same principle we applied in the case of taxes or government spending. In a period where we are forced against the budget hard, where many people are going to pay real hard costs to get us out of the economy, we ought to be using the most efficient resources we can.

Representative REUSS. I turn now to Mr. Laidler. We have laid out a little three-point program for getting interest rates down without going off our rockers monetarily; namely, one, better debt management; two, better fiscal management, with the idea of controlling the budget deficit at least; and three, better credit concentration, if you want to call it that, particularly, as Mr. Meltzer points out, in areas where it's governmental policy in the first place that produces this huge credit allocation.

Would you agree generally with that three-point approach or could you add to it?

Mr. LAIDLER. I think so, but I would add one or two important points that I think Mr. Meltzer is just taking for granted that we all know; namely, that at the end of the day interest rates aren't controlled by governments and aren't controlled by monetary authorities. They are set by markets and the influence that the authorities can have on those interest rates are going to be of two kinds: psychological but nevertheless real influence by giving clear policy signals, and a direct influence by government changing its own supply and demand behavior in the market.

The second thing I think that needs to be said is that the time horizon of the policies that we are discussing here perhaps ought to be made more explicit. I get the impression the debt management policy could be fixed up rather quickly. It's not clear to me how fast a marked difference in the size of the Federal deficit could be made. Presumably that would require new legislation. It's not clear to me how fast some of the grosser subsidies to particular kinds of investment could be taken out of the picture. It may well take a year or 2 years. If monetary policy stays on course, the problem of high interest rates will have gone away by then.

That doesn't mean that you might not want to top subsidizing particular kinds of investment anyway because they are socially inefficient, but I think to view these policies primarily as a means of dealing with the current interest rate problem might be a little misleading. I don't really see interest rates staying at this level for a year or two. I expect to see them slowly coming down as the inflation comes down and people get more used to the idea that the monetary policy was in place. Of course, if I was confident of that, I could make a lot of money on my judgment.

Mr. MELTZER. Could I add one thing very briefly? A very strong commitment by the Congress enforcing the monetary policy that we have.

Representative REUSS. Right. But you serve on the Shadow Open Market Committee and you're certainly, I hope, not going to give Congress a complete flunking grade since 1975. Before that, the less said, the better. After all, it was from the Congress that the impetus came to say, well, we aren't monetarists and we don't think in enjoining a

prudent increase and only a prudent increase on the Fed we're solving all problems, but at least we did say that.

Mr. MELTZER. And that was good.

Representative REUSS. And while our record has not been perfect, it hasn't been totally flunking.

Mr. MELTZER. What I would urge on the Congress would be a statement which says we want them to persist in this policy. I think that would have a very useful effect on the public expectations, that the Congress will be willing to share some of the heat. I know that's a difficult thing to do as we approach—we're always close to an election and as each day passes we get closer to the next one—but I think that would be a helpful thing from the standpoint of the marketplace to know that the Congress is not going to be leaning on the Fed to throw in the sponge even if the administration makes moves in that direction.

Representative REUSS. Yes, although I have to say that calls for profligacy of the Fed have not come from the "sons of the wild jackass" in Congress but from the most buttoned-down circles. So I'm not so sure that our reassurance would have all that wonderful psychological effect.

Congressman Richmond.

Representative RICHMOND. Mr. Meltzer and Mr. Laidler, I think we both agree that with our present policies and with the present atmosphere in the United States we seem to be heading toward a recession. I notice any number of markets—the luxury real estate market in New York City, which was virtually impervious to ups and downs up to now, has started to soften. I notice markets here in Washington softening. I notice the dollar value of orders for industrial products is on the skids. I really find the state of American industry in general has been deplorable lately.

Then we have no credit controls. We have the average American buying all sorts of unnecessary goods on credit. We have no import controls. I find that 50 percent of all of our agricultural tractors are imported from abroad, and all small tractors that we use in the entire country are imported from Japan.

Now what good is any type of monetarist policy when you have this group of events taking place in the United States all at once due to the high interest? People suddenly seem to be able to live with 20-percent interest. I figured out how they do it, too. The average merchant who used to stock 100 suits in 20 different sizes now is only stocking 50 suits, and somebody recently told me he went into Brooks Bros. to buy himself a 42 long blue blazer. Now what is more standard than a Brooks Bros. 42 long blue blazer? And Brooks Bros. said, "Thank you very much for the order. We don't have it on hand but we will ship it to you in 2 weeks." What appears to be happening is that our American merchants who were virtually being driven out of business are adapting to this problem. They are passing the interest rates on to the consumer. They are keeping half the inventory they kept. So somehow or other, they are managing. So that merchant is managing on 10 percent instead of 20 percent interest because the inventory is half as large, and people are just waiting a couple weeks for their delivery.

89-772 O - 82 - 9

What I wonder is with this monetarist policy, we are certainly headed toward a recession. How long or how deep do you think this recession will be, and when do you think the American people are going to wake up to the fact that they've got to stop buying so many luxury goods and start using their money for productive purposes until we have a really deep recession?

Mr. LAIDLER. I don't know how deep the recession is going to be. The turnaround in monetary policy alone has been sufficiently marked to produce a recession and I believe that is an integral part of the mechanism, unfortunately, for getting the inflation rate under control.

Representative RICHMOND. You believe it will be deep?

Mr. LAIDLER. I'm not sure about the structure of consumption at all.

Representative REUSS. Americans will go buy $4 billion worth of Japanese video tape recorders this year. Wouldn't it be better to put that $4 billion in some productive assets?

Mr. LAIDLER. Apparently not or I would expect the American people to reallocate their consumption and savings. I might deplore it personally, but it is after all their wealth and income that they are allocating.

Representative RICHMOND. But I think all of this must lead to a rather deep recession because everything we're doing is totally counterproductive.

Mr. LAIDLER. That I'm not sure of.

Representative RICHMOND. We can't be rebuilding the United States by buying video tape recorders and having a $35 billion account with Japan for luxury goods.

Mr. LAIDLER. That may well be true, but I think that the policies are doing some things to rebuild the United States. I believe that a stable monetary environment is an absolute sine qua non in getting the effective use of resources in the long run.

Representative RICHMOND. What about some type of credit controls? What about banks not giving out money for power hungry mergers which really don't make any sense?

Mr. LAIDLER. I was brought up in the United Kingdom——

Representative RICHMOND. We can't raise money for a new steel mill in the United States. No steel mill in the United States is capable of raising that kind of money.

Mr. LAIDLER. You're probably very lucky.

Representative RICHMOND. On the other hand, you're likely to put two companies together for no other reason than one man happens to be power hungry.

Mr. LAIDLER. As I say, I was raised and educated in the United Kingdom and I heard arguments of exactly the type you're putting, that the way to modernize the British economy and make it more productive was to implement credit controls and have the Government involved in allocating resources toward what they regard as productive investments; and I believe that the absolute shambles that you see in British industry now is the result of 25 years of that kind of policy; not because the bureaucrats were incompetent, not because they were in any way malevolent; simply because I do not believe, in a complex modern economy, that you can trust the Government sector to make that kind of decision and get it right. I think bureaucrats are as likely

to make the right decisions as private businessmen, but the difference between bureaucrats and private businessmen is when the private businessman makes a mistake he gets out of it as fast as he can, whereas when a bureaucrat makes a mistake he writes a long letter explaining why it wasn't really a mistake. So I'm very skeptical.

Representative RICHMOND. I agree with you. How would you get the message to the American people that the party is over, and that they'd better start saving money and not waste their money on totally useless goods? How do we get the message to them? The plants are in dreadful shape and we've got to start rebuilding our industry. How do we get people to understand how critical these matters are?

Mr. LAIDLER. I think that their inability to sell their products or to find jobs at the wages they used to is the signal you can rely on.

Representative RICHMOND. It didn't work in the United Kingdom.

Mr. LAIDLER. It's working wonderfully in the United Kingdom now because the signal has finally been given.

Representative RICHMOND. When industry starts losing money and it requires major capital investment, where's it going to get the capital investment? It's no longer a very good credit risk.

Mr. LAIDLER. Perhaps it shouldn't have the capital investment then. Perhaps the industry should wind down and the resources should go somewhere else.

Representative RICHMOND. Our steel and automobile and agricultural industries should wind down and go elsewhere?

Mr. LAIDLER. If I knew the answer to that question I would believe in economic planning.

Representative RICHMOND. You said perhaps we should wind these things down and go elsewhere. Where would you have our steel and automobile industries go?

Mr. LAIDLER. I wouldn't have them go anywhere, sir. I would leave it to the judgment of the people who are putting their own wealth at risk to decide where they are most likely to get the best return. If you tell me they are no longer willing to take the risk on the steel industry because they don't think they are going to get a good return there, I'm willing to abide by their judgment. That tells me the structure of comparative advantage in the world has shifted against the United States steel industry.

Representative RICHMOND. What do we do with national defense?

Mr. LAIDLER. I would think that national defense is a proper matter for Government to be concerned with.

Representative RICHMOND. Without a vibrant steel and automobile industry we don't have any national defense.

Mr. LAIDLER. If national defense really requires that kind of industry, then national defense procurement will end up putting resources into the desired channels toward those industries. You know, many countries have got quite viable defense programs without defense industries.

Representative RICHMOND. Viable defense programs? The Soviet Union and ours—no other countries really have a viable defense program. We are spending 8 percent of our GNP on it. The only other country in the Western world that approaches us would probably be France.

Mr. LAIDLER. Then I don't see that the defense industry is in any great trouble.

Representative RICHMOND. I see American industry continuing to decline and continuing to fail to attract the capital to modernize and just bail out by these ridiculous, worthless, wasteful mergers that make absolutely no sense— and as the chairman said, that's where an awful lot of cash is going—here a bank gives $3 or $4 million for an idiotic merger. Why not give that money for a new steel mill?

Mr. LAIDLER. That, sir, is a flow of credit. It doesn't represent the flow of real resources. You must ask what the vendor of the resources does with the cash he receives before you can——

Representative RICHMOND. The vendor of the resources in the case of some of these major mergers—the stockholders have gotten cash at the end. The stockholders have then taken that cash and probably bought themselves another stereo set.

Mr. LAIDLER. If they believe that investment in stereo sets is more profitable than investment in the steel industry, that might be telling you something about their view of the long-run stability of the American economy as a place in which to invest. The sine qua non of getting stability back into the U.S. economy so people feel it's worthwhile again to undertake long-term investments is a stable monetary environment.

Representative RICHMOND. Do you have any comments, Mr. Meltzer?

Mr. MELTZER. Yes, I'd like to make several. First, on the question about money growth control policies. We have lots of examples of countries which have succeeded in reducing the rate of inflation by the policies we now have. They may not have advertised them the way we did, but there is a long record of success. Indeed, we can make a clear statement that no country ever ended inflation without cutting the growth of money in the way we are doing. Cutting inflation will not bring nirvana. It will just reduce inflation.

If you want to get real growth up, you have to have efficient use of resources and that's what the fiscal package is about.

Second, I don't believe we are going to have a serious recession, partly for the reason you mentioned. I've believed for a long time we're going to have a recession and it's more widely shared now than it was 6 months ago. One reason is that with 19- or 20-percent interest rates, most merchants are very careful about how much inventory they have. Consequently, they don't have quite as much to cut when the recession comes. That's going to limit the recession, not increase it.

Third, let me give you an example of what happened in Britain when the government gets involved. During the 1970's, they thought that the right place to invest for Britain was in steel and autos and they modernized the steel and automobile industries. They spent £9 billion—$18 billion approximately—a far bigger percentage of their economy than of ours—in order to expand those industries.

Given the worldwide condition—and it's a worldwide problem, not just an American problem or a Canadian problem—the current government is spending £6 billion to unwind some of those investments, to lay off workers, to buy them out, to close up plants, and so on. We have one government over a period of a decade spending £9 billion to do one thing and another one spending £6 billion to do the opposite. That tells

you something about the record when we get the government into the credit allocation business.

As peculiar as it may be, and it often seems very peculiar, it's better to leave it to the market and let the people who make the decisions take the losses and get the gains.

On the question about the mergers, I know that's very upsetting when people read about that. They commonly read that as an allocation of credit. Let's just follow through the transaction the way Professor Laidler started to do.

Some company comes in and borrows some money to buy the stock and pays the money out to the stockholders. The money is there as a commitment from the bank. The bank honors the commitment and a check is paid to the stockholder and he deposits it back in the bank. Suppose he doesn't. Suppose he buys a TV set. The money still ends up in somebody's bank account.

There's no real use of resources in that exchange. There's just a shifting. Somebody borrowed the money and somebody else received it. No increase in the interest rate comes out of that process.

Representative RICHMOND. Nothing constructive, either.

Mr. MELTZER. Somebody has changed the ownership of his assets. It's no different than if I sell you my existing house. You go from cash to an equity in a mortgage and I go from equity in a mortgage to cash. I then take the cash you took out of the bank and I put it into the bank. There's no net use of credit going on in that process.

What we have to worry about—and we do have to worry about it—is the efficiency with which we use real resources. The reason we are not building steel mills and automobile plants is because the rates of return that people receive in those industries are not high. The reason we're building electronics factories is because the rates of return have been good.

We want to increase the rate of the growth of investment. The program we now have has given a spur to investment. The corporate income tax has almost been wiped out. Many people say the debt markets are going to have great difficulty handling corporate refunding because, normally in cycles, corporations reduce short-term debt and roll it over into long-term debt. I think there's going to be a difference this time. When you reduced the corporate income taxes, you effectively eliminated two things which have caused corporations to borrow on debt and not sell equity. One was the double taxation on dividends. The other is the advantages of interest deductibility on long-term debt. If you don't pay taxes, then you don't get the advantage of deducting interest. So we have made a step toward making those balance sheets—not necessarily in January but 2 years or 3 years when we look back, we're going to look back at a much stronger financial structure.

I think the answer to your question is we have made some significant progress by taking these steps. As an economist, you see what's happening. You read these things much more quickly than the public does. You want to see the results of the program this year. So do I. We'll have a mild recession and then we'll see the results. We'll be back to the long-term productivity growth rate within 1 year and we will see the results of what Congress and the administration have done.

Our problem is, we'd like to get those gains now. We're impatient. We don't want to wait for them.

Representative RICHMOND. Thank you.

Representative REUSS. A fascinating discussion. We are past noon and I don't want to prolong it. I would like to address one more question to Mr. Meltzer.

In answer to Congressman Richmond a moment ago about the merger case, you said, well, sure, but every credit has a debt and the check gets into the hands of the stockholder who sold it and so on.

I put it to you—and correct me if I'm unjust—that you're much too blithe about what credit is being used for. For example, if the banks lend a billion dollars to Bunker Hunt to corner the silver market and then the people from whom he buys the silver used that deposit to corner the soybean market and the people whom they buy the soybeans from corner the—ad infinitum—I don't really think that's as good as a bank loan of a billion dollars to the ABC eager-beaver company that installs new machine tools to build an up-to-date plant; then the people who get the checks for building the up-to-date plant and machine tools spend them on new R. & D. and so on. Am I being unjust?

Representative RICHMOND. Let me just paraphrase the chairman one second. Take DuPont and Conoco where some banks had a loan of $4.5 billion. What if those banks had loaned that $4.5 billion to DuPont to totally modernize their facility and bring them up to the highest technical level of any chemical company in the world? Wouldn't that have been one heck of a lot more productive for DuPont and for American society than buying Conoco, which absolutely makes no sense except for somebody's interest in becoming more and more powerful?

Representative REUSS. Since credit is so short, as witness the outrageous level of interest rates?

Mr. MELTZER. Let me say that when you look at the way in which the credit is being used, you're looking at the sideshow and missing the main show. The main show is people thinking there are greater gains in speculating in silver or real estate than there are in making productive investment. The way to cure that is not to try to prevent people from doing what they're doing, but to encourage them to do what we want them to do. Don't try to tell them you can't have credit for this. Let's try to provide a better climate. And that's what I meant when I said I think the Congress and administration has made some progress in making a climate in which people will want to invest in new plant and equipment instead of using credit to speculate where the greater returns appear to be.

The silver market—Mr. Hunt's record in the silver market is not one that is going to encourage him to make many trips in that direction.

Representative REUSS. I don't know. He's still on his trip.

Well, we could pursue this all day. I agree with you that structure is all important and that the sooner we rid our system of all the wrong signals, the bad incentives, the misdirections, the better off we will all be. Where we differ, however, is I think we can't quite wait for all that to happen and we ought to give it a little nudge by right now telling the banking system, "Look, gentlemen, if you want to patriotically set the stage for the Meltzer millennium which will be along in a year or

two, won't you—other things being equal—consider a productivity-enhancing, inflation-fighting investment loan even if you have to make it at a percentage point less than your loan is expected to be?" I think that's a fair statement of the difference between us and sometimes knowing one's differences is the beginning of wisdom. So thank you very much. We expected a good show and we certainly got it. We are grateful to you.

Thank you for coming, gentlemen.

We now stand adjourned.

[Whereupon, at 12:10 p.m., the committee adjourned, subject to the call of the Chair.]

[The following information was subsequently supplied for the record:]

STATEMENT

OF THE

NATIONAL RETIRED TEACHERS ASSOCIATION

AND THE

AMERICAN ASSOCIATION OF RETIRED PERSONS

ON

"A FISCAL POLICY APPROPRIATE FOR TODAY'S NEEDS"

SEPTEMBER 22, 1981

A Fiscal Policy Appropriate for Today's Needs

The euphoria that followed the passage of the Economic Recovery Tax Act of 1981 has evaporated in a little more than a month, as the business community, and especially the financial community have begun to realize that punitively high interest rates are the price that has to be paid for the huge tax cuts and consequent increases in projected budget deficits. These budget deficits, in turn, indicate continued heavy borrowing by the Federal Government, and consequent pressure on available supplies of credit, leading to further "crowding out" of other borrowers and consequent higher borrowing costs for everybody. The Federal Reserve system has made it clear that it will not increase the growth of the money supply to accommodate larger borrowings. Even if it did step up money growth, the effect would probably be to stimulate inflationary expectations, since financial markets are conditioned to interpret faster growth in the money supply as heralding future higher inflation.

In any case, excessive dependence on monetary policy to curb inflation (while stimulating the economy through tax cuts) has produced interest rates that are crippling the housing and

automobile industries and their suppliers, as well as threatening to negate the upsurge in business investment which the liberalized depreciation provisions of the tax bill are expected to generate. An environment of record or near-record and erratically fluctuating interest rates is not conducive to an upsurge in business investment, as borne out by the most recent survey of planned plant and equipment expenditures, which showed that no real (inflation-adjusted) increase in such spending is planned for 1982. These high rates also increase the likelihood that another recession will occur as early as this year.

The situation now, therefore, is that, while whatever beneficial ("supply-side") effects the tax cut package will have on productivity growth and inflation are far in the future, the expected larger budget deficits are producing high interest rates right now. Furthermore, it is not at all clear that the cuts in personal income tax rates will have the beneficial effects on the economy that have been claimed, i.e., that they will "pay for themselves" by future increases in tax revenues from the higher incomes to be generated by lower marginal tax rates.

The recent collapse of the fixed-interest (bond) market is well-known, but there has been a tendency to blame "Wall Street" for the reluctance of investors to buy fixed-interest

securities. This is blaming the messenger for delivering bad news. Investors and savers have good reason to avoid the type of long-term bonds and savings instruments that in the past have been devalued by unchecked inflation. The inflation rate has been reduced from the double-digit levels of 1980, but it is still much too high. Furthermore, the reduction in the inflation level is largely due to what may turn out to be transient surpluses of oil and grains; the basic, "core", or underlying rate of inflation has been reduced very little.

It is understandable that Congress should be frustrated by the present situation, and in its frustration, suggest undesirable measures as hoped-for solutions, but some of the solutions proposed would make the situation worse. For example, credit controls would impose a new rigidity on financial markets, to the extent they worked at all, at a time when we need fewer, not more, such rigidities. The experience with the 1980 credit controls, which admittedly had a different purpose, suggests that such controls can cause dangerously erratic changes in business activity.

What is needed is at least a partial reversal of the cuts in personal income tax rates to reduce future budget deficits, coupled with continued attention to trimming unnecessary budget

outlays, particularly in military expenditures. The reductions scheduled for future years should be deferred or sealed back until we see how the economy develops. Also, additional revenue sources should be developed, such as the reduction or elimination of at least some of the tax expenditures now costing billions of dollars or another windfall profits tax on deregulated natural gas. If steps are not taken to scale back the revenue loss by some means, the combination of stimulative fiscal and restrictive monetary policies will ensure that the present unsatisfactory situation lasts a long time. At best we would be likely to have a proloned period of stagnation, with intervening recessions and only a slowly declining inflation rate.

While the budget deficits could, theoretically, be eliminated or reduced solely by cuts in expenditures, doing it that way would require huge reductions in budget outlays. That in turn raises the danger that many worthwhile programs, such as Social Security, Medicare, and others vitally important to the elderly, would be gutted. This would particularly be the case if defense expenditures were exempted from reductions.

The restoration of part or most of the personal income tax base unwisely given away by tax cuts would enable the Federal Reserve System to pursue a monetary policy more

accommodating to investment and growth. Relieved of the burden of fighting inflation single-handed, the Federal Reserve could relax its monetary growth targets, and interest rates might fall faster than they otherwise would. When budget balance is attained or approached, personal income taxes could be indexed to prevent "bracket-creep."

Monetary policy could be even more accommodative if the doctrinaire opposition to intervention in wage settlements and pricing decisions were abandoned. Such intervention would recognize that cost-push inflation is now more of a problem than an excess of demand. So long as interest rates remain as high as they are, consideration should also be given to providing guidance to financial institutions to avoid financing such inessential uses of credit as corporate takeovers and commodity speculation, which may not, in the aggregate, represent a large dimension of credit, but prompt demands for credit allocation.

○